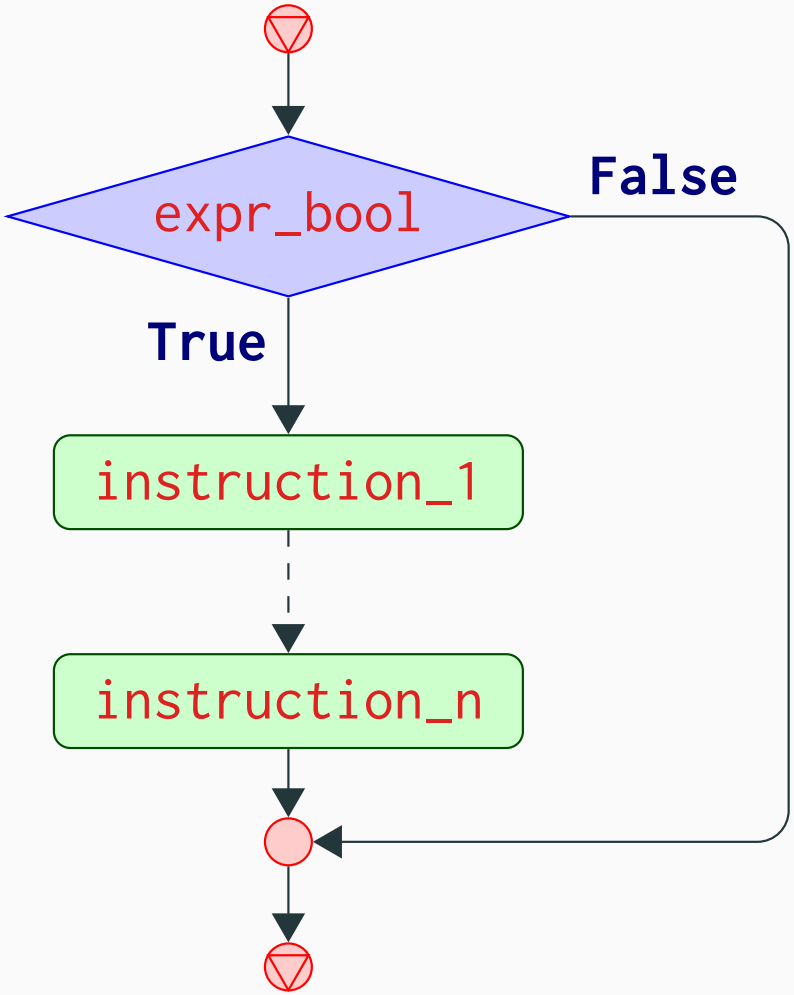
Structures de contrôle en Python

G. Dewaele

4 septembre 2017

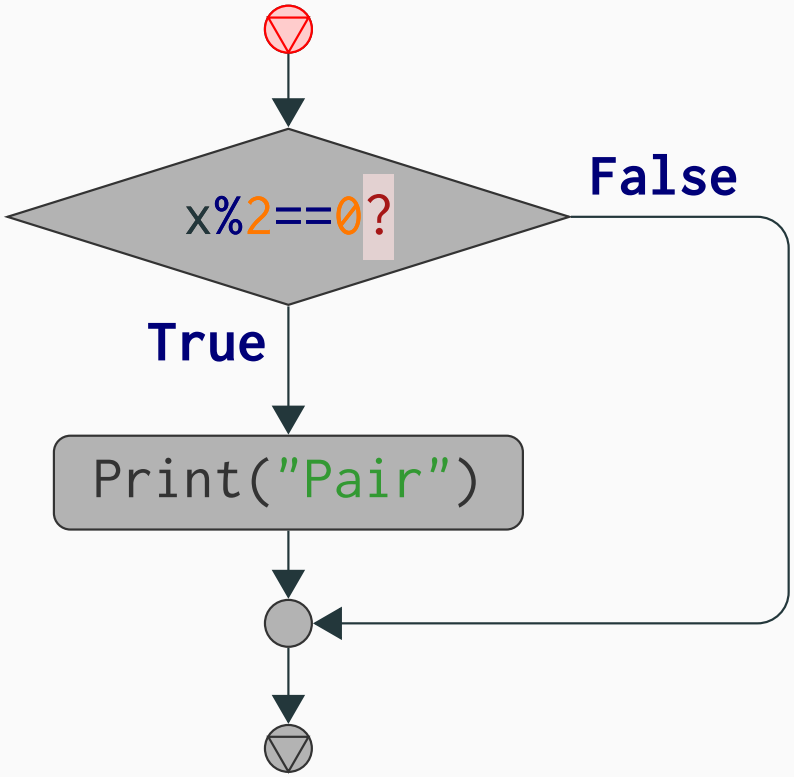
Lycée Louis-le-Grand

Structure conditionnelle

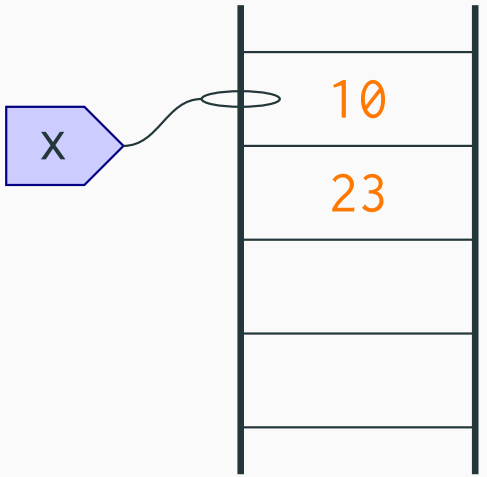



```
if expr_bool :
    instruction_1
    ...
    instruction_n
...
```

Exemple




```
if x%2==0 :
    print("Pair")
```



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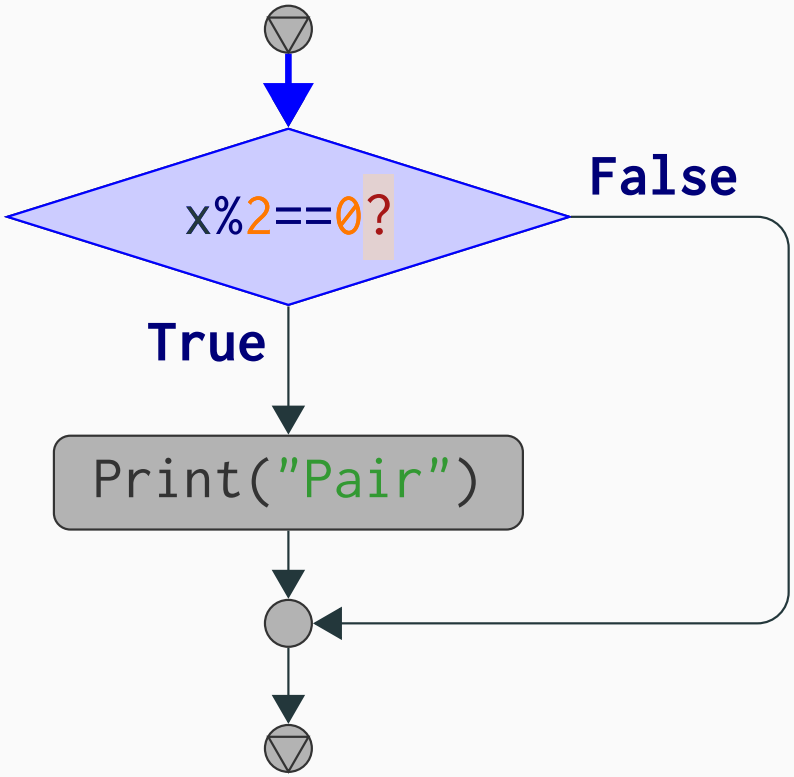


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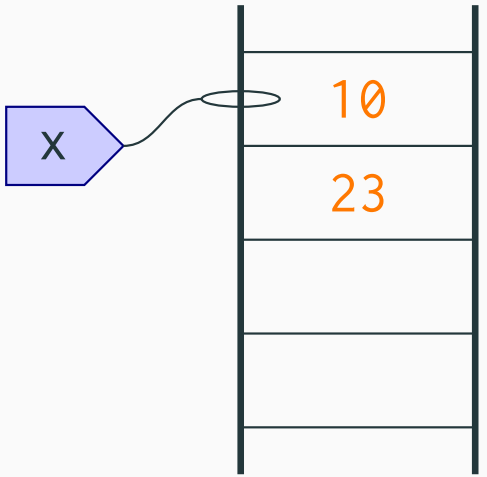

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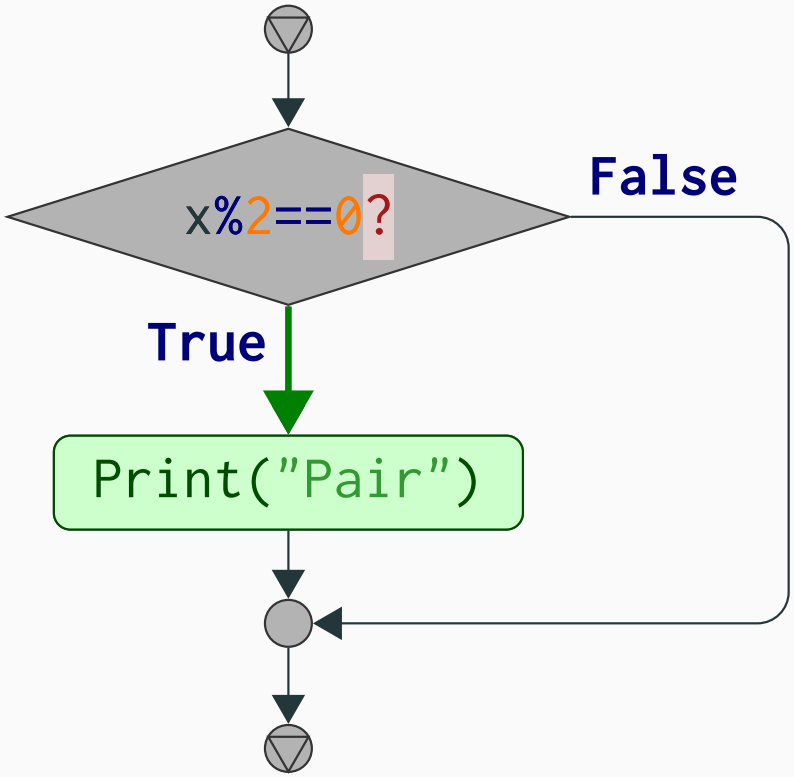


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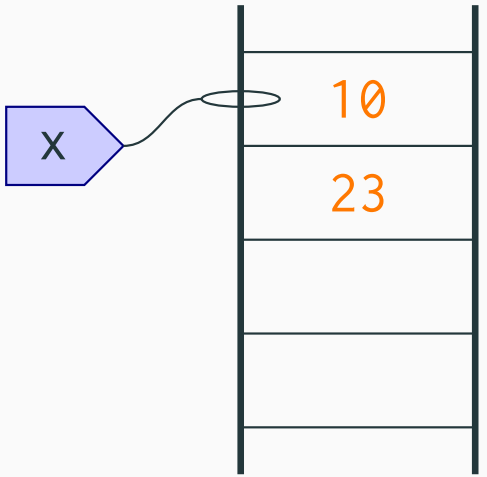

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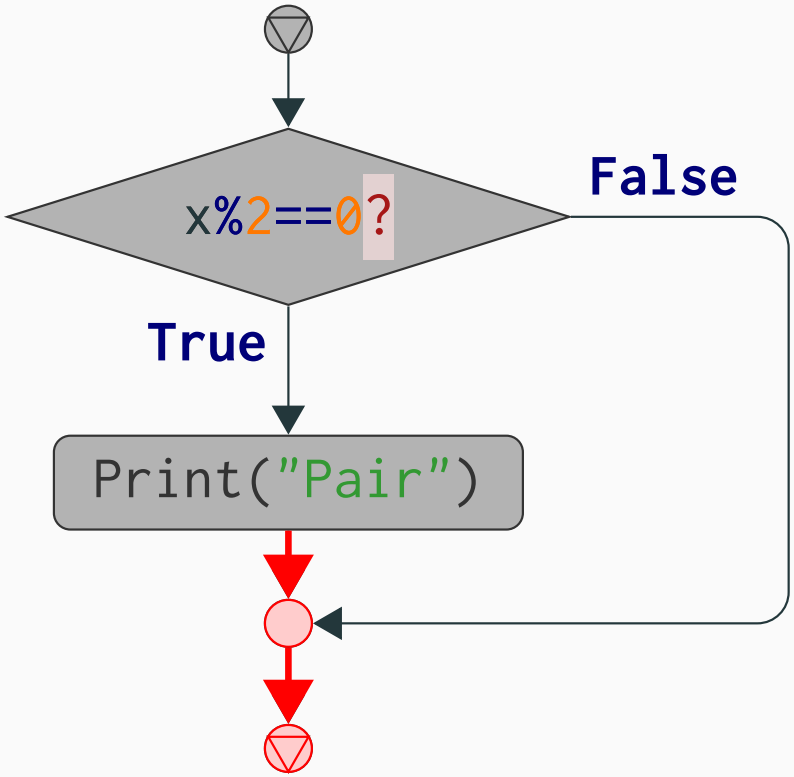


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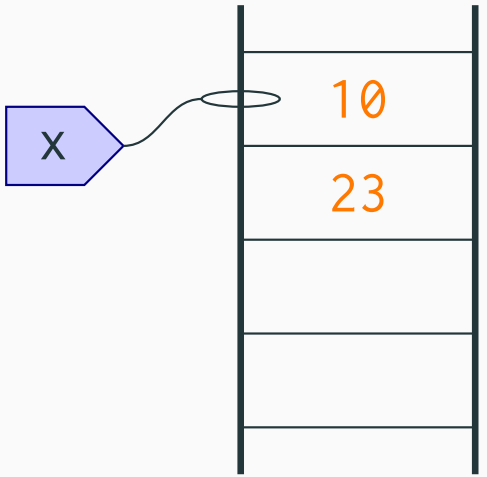

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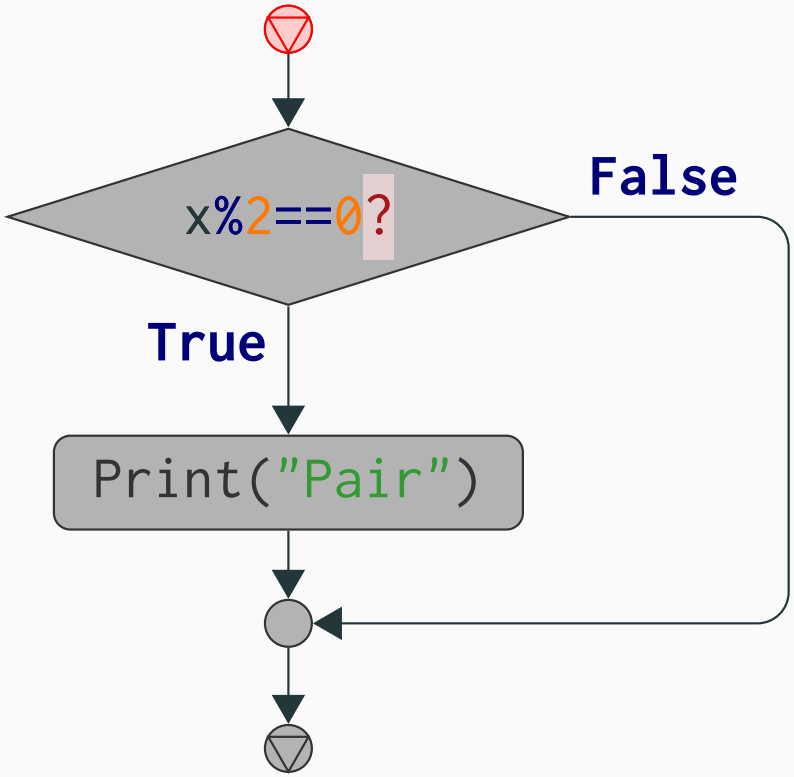


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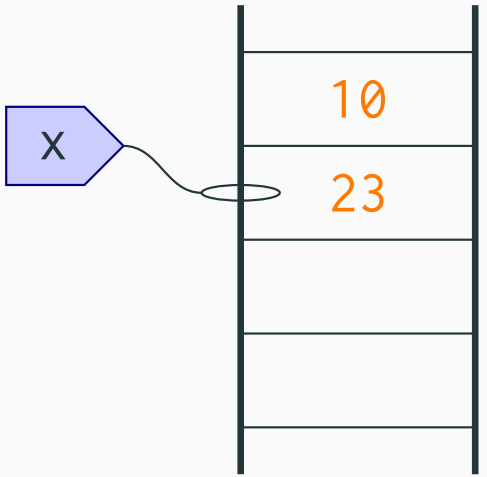
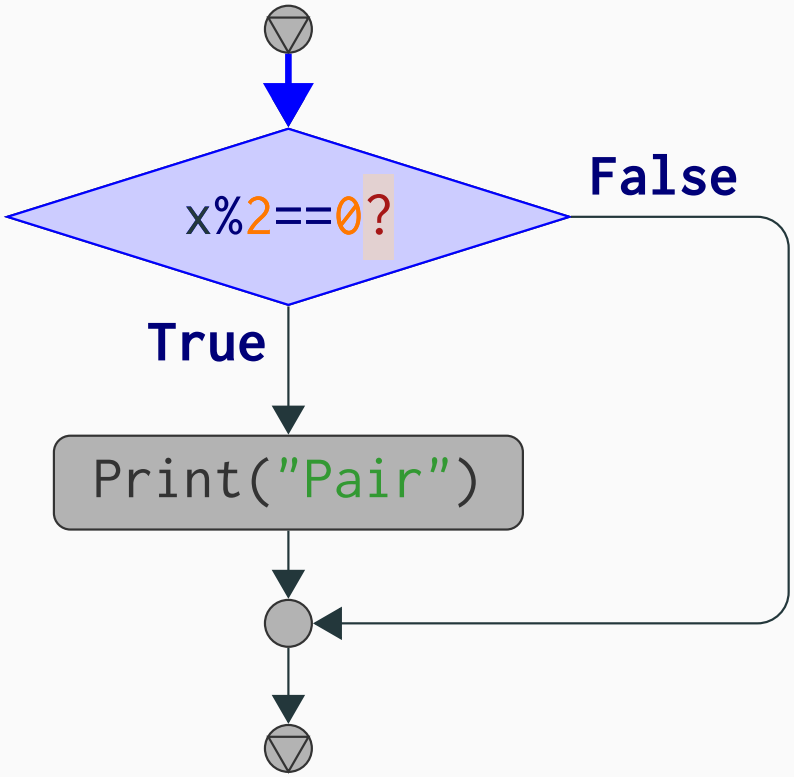


Exemple

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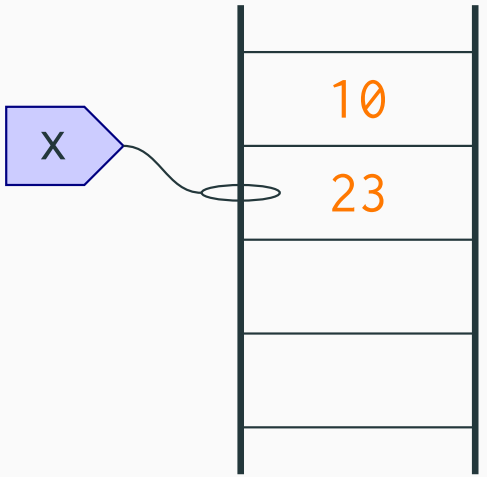

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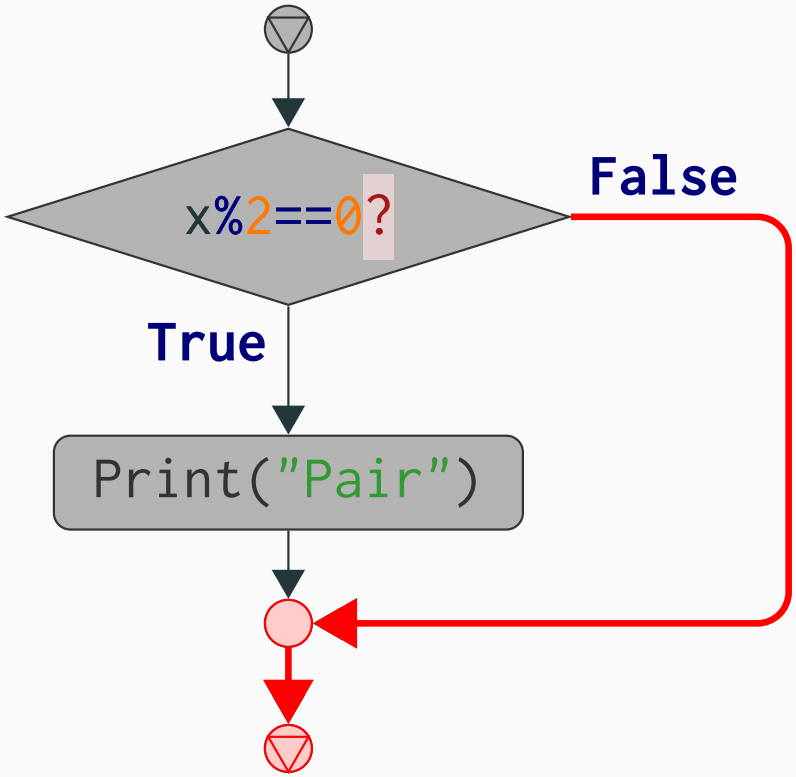


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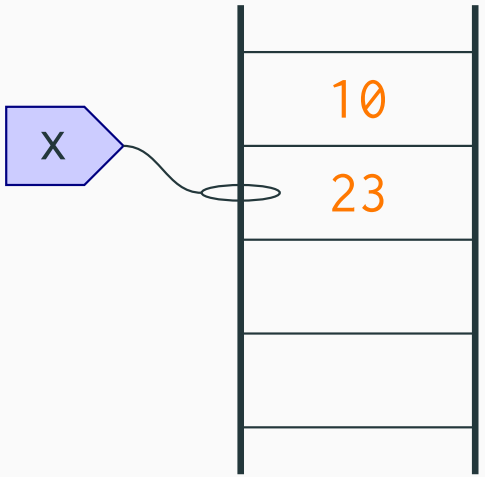
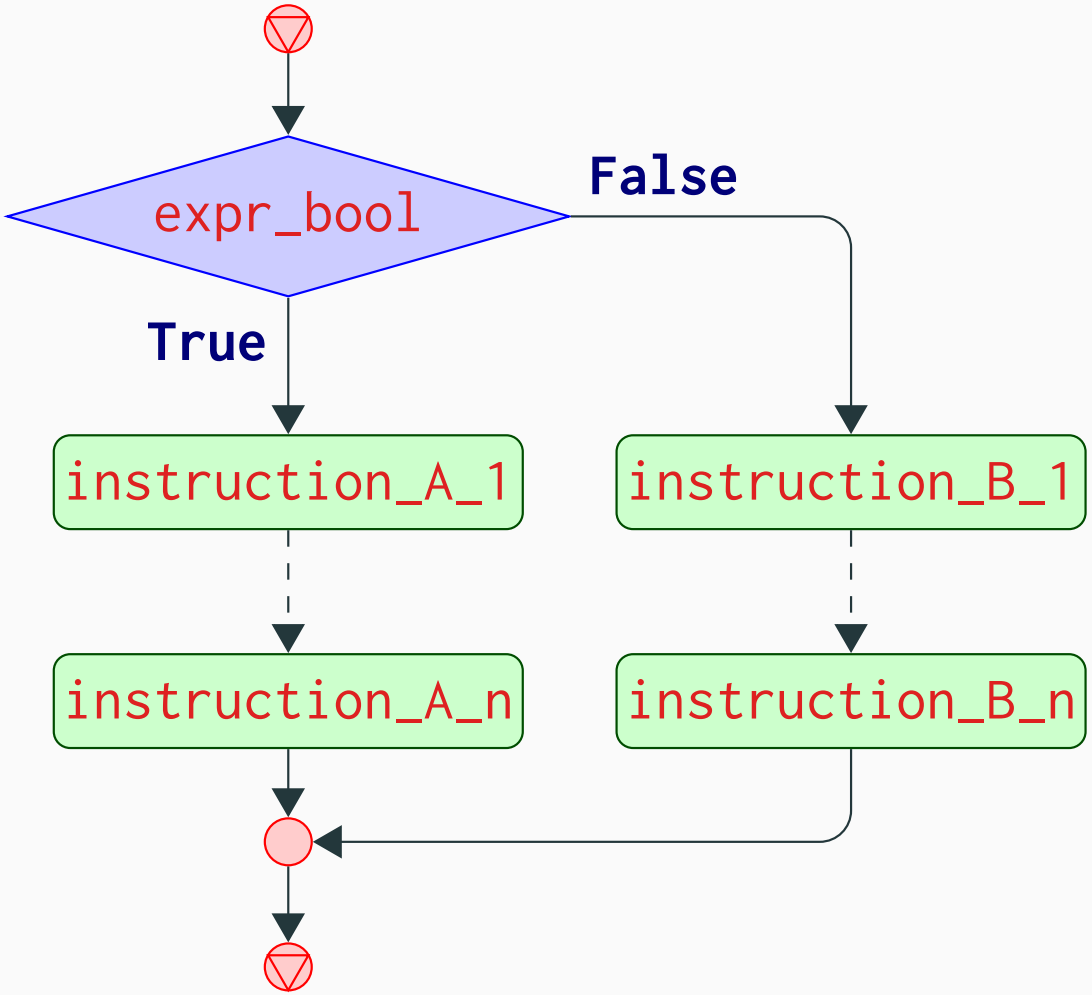
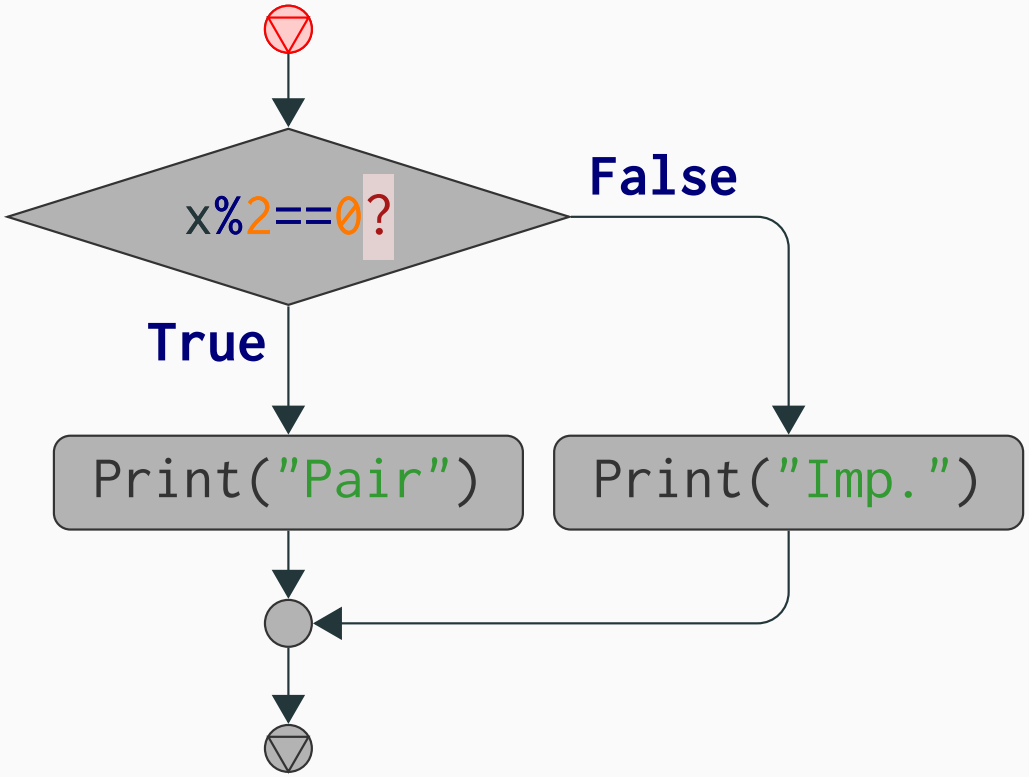


Structure conditionelle (2)




```
if expr_bool :
 instruction_A_1
 ...
 instruction_A_n
else :
 instruction_B_1
 ...
 instruction_B_n
...
```

Exemple

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if x%2==0 :
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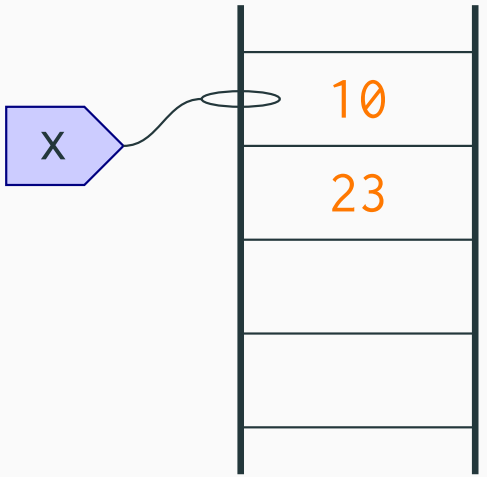

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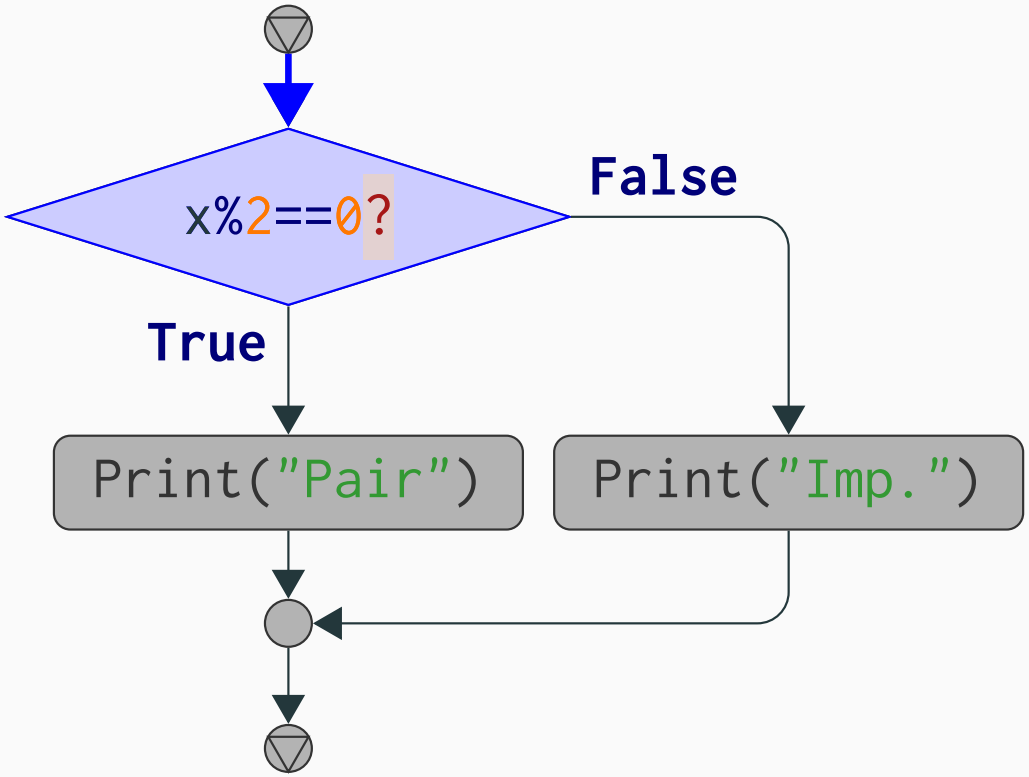


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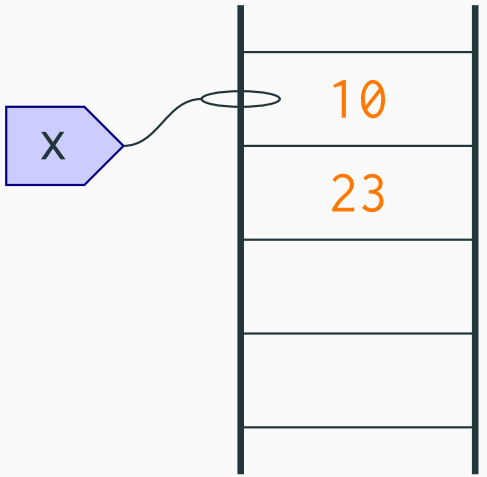

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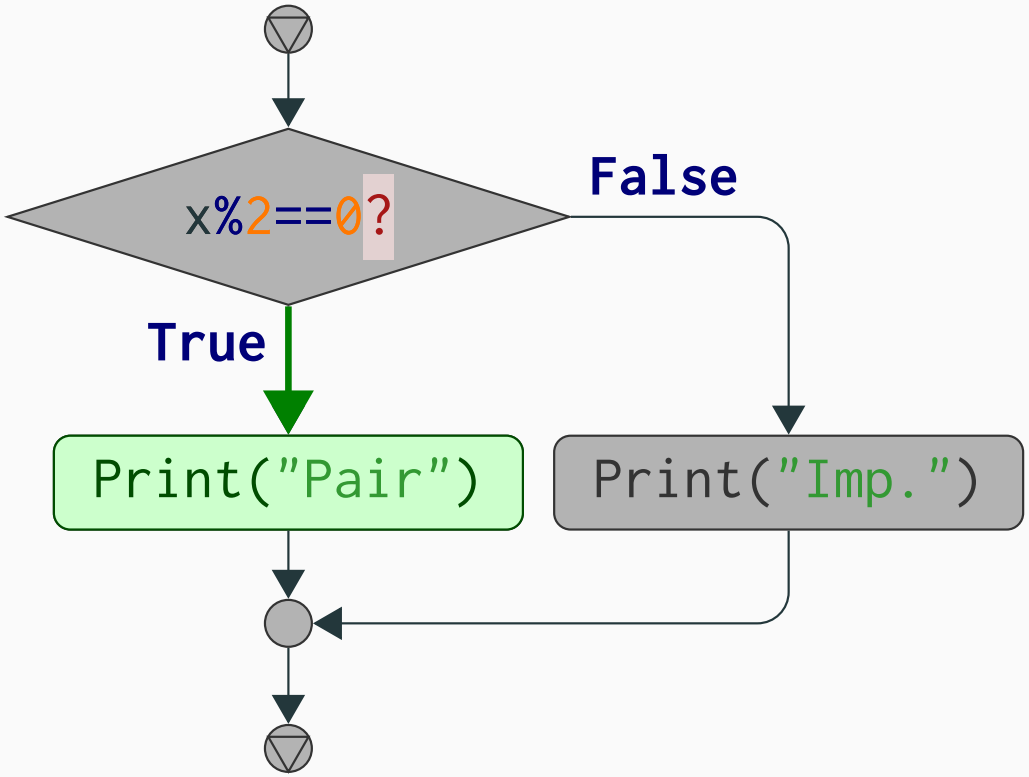


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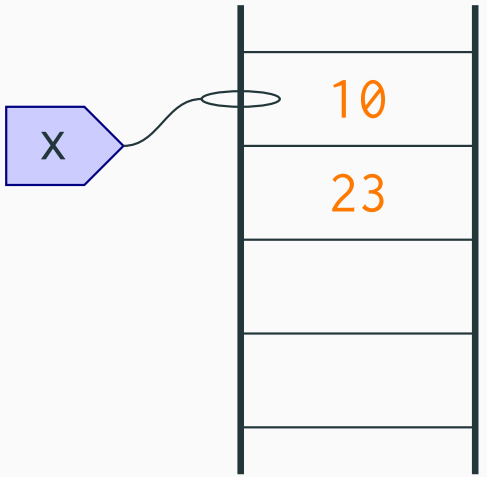
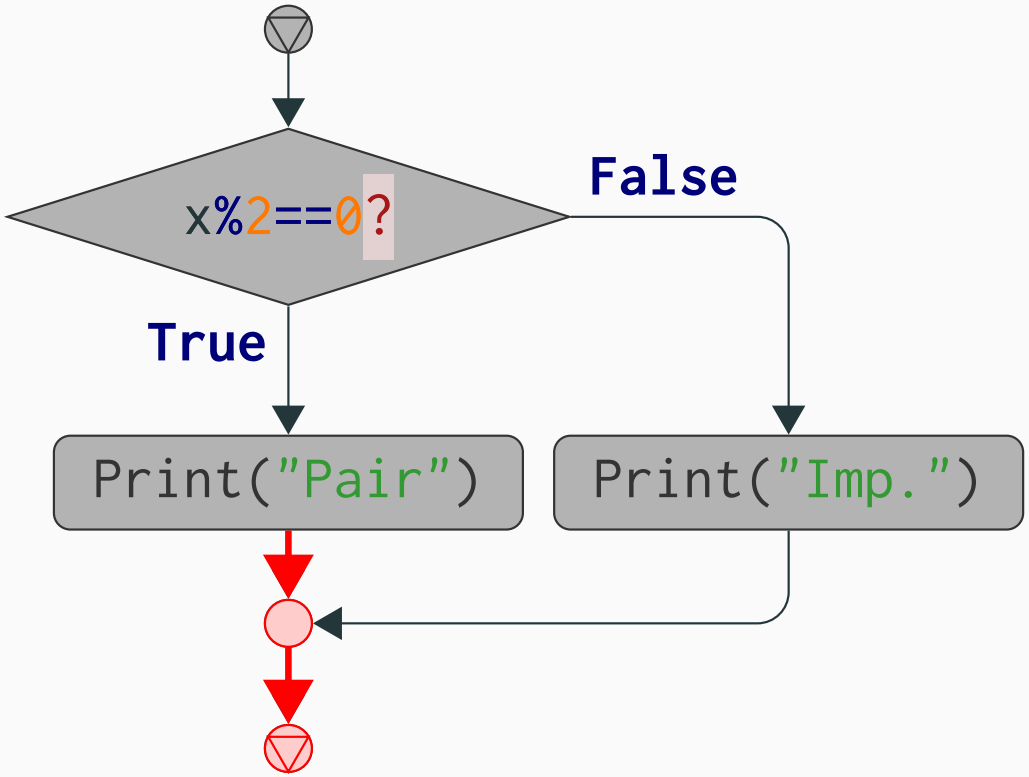


Exemple

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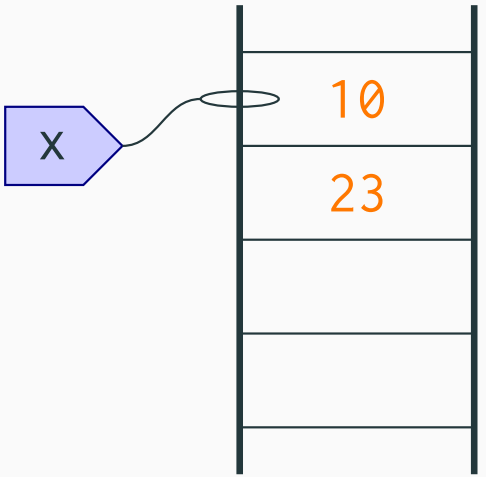

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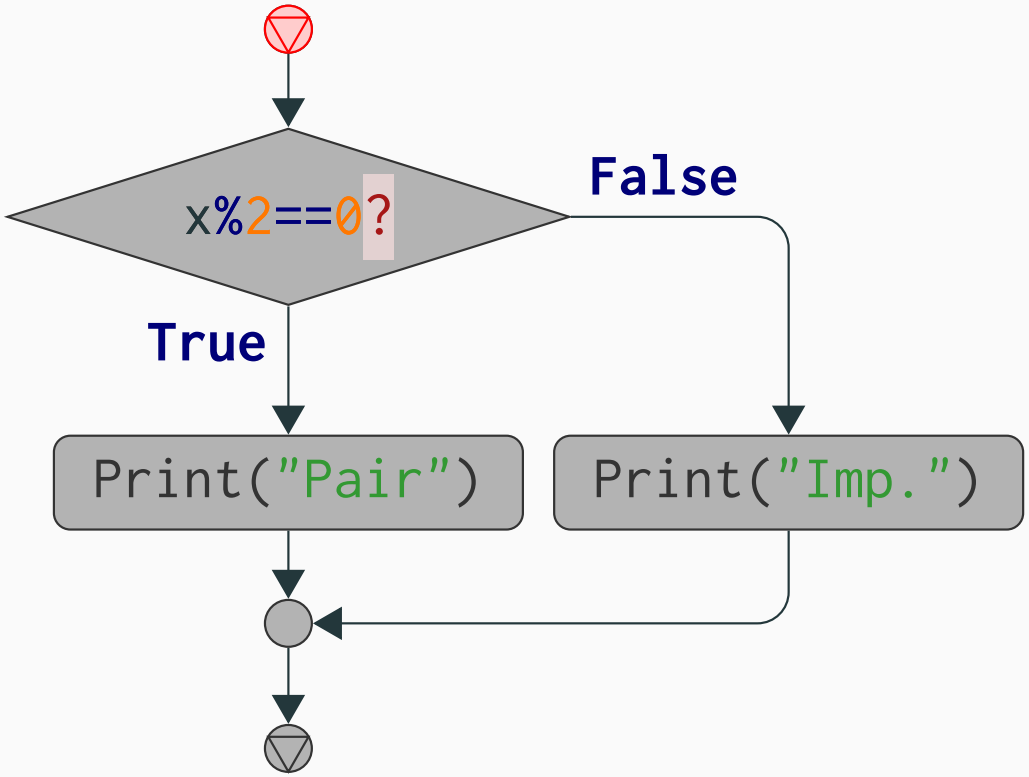


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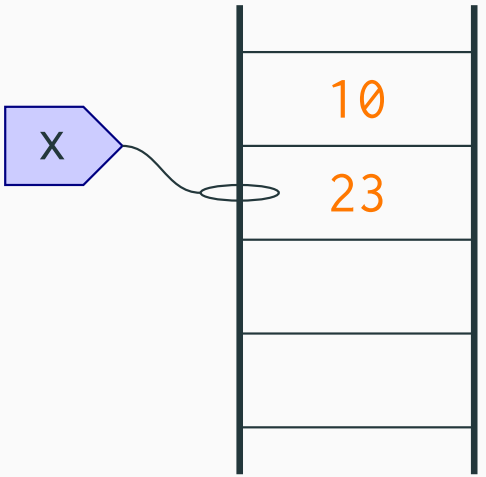
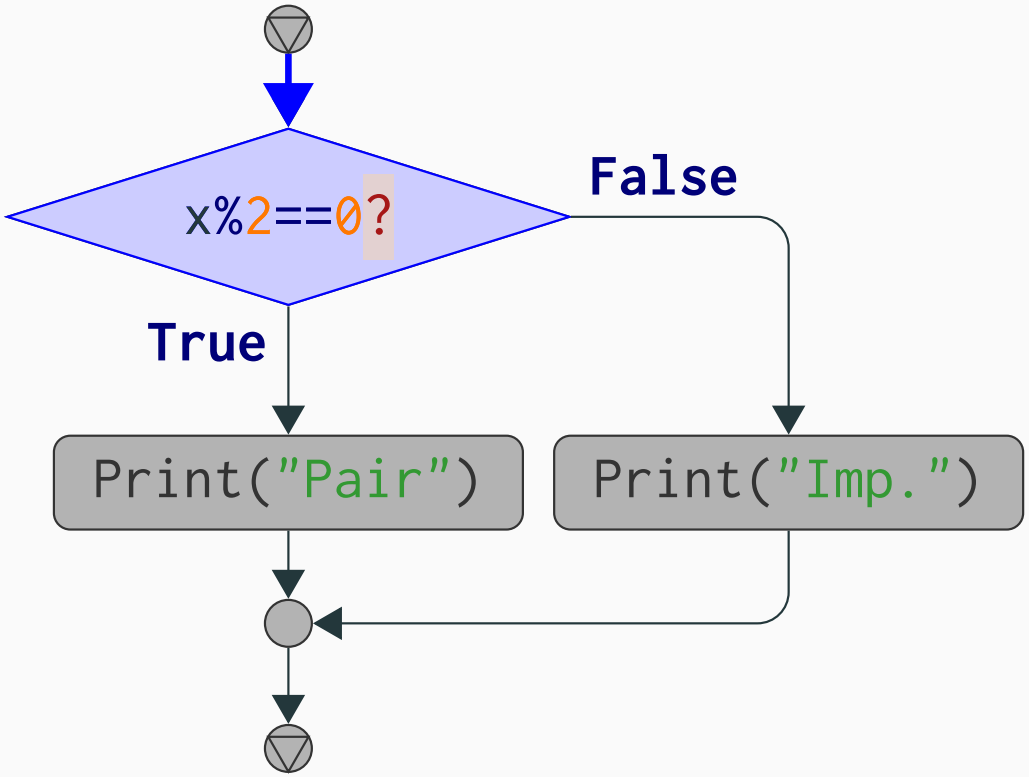


Exemple

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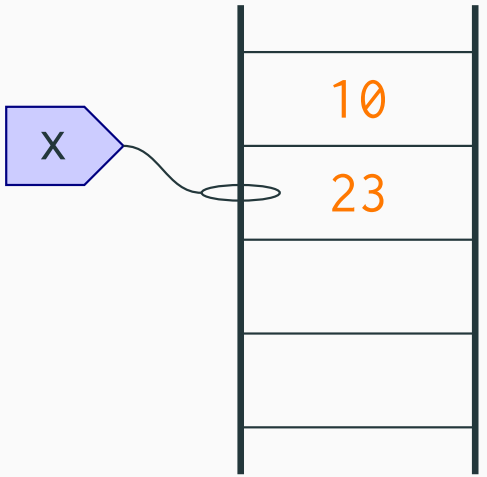

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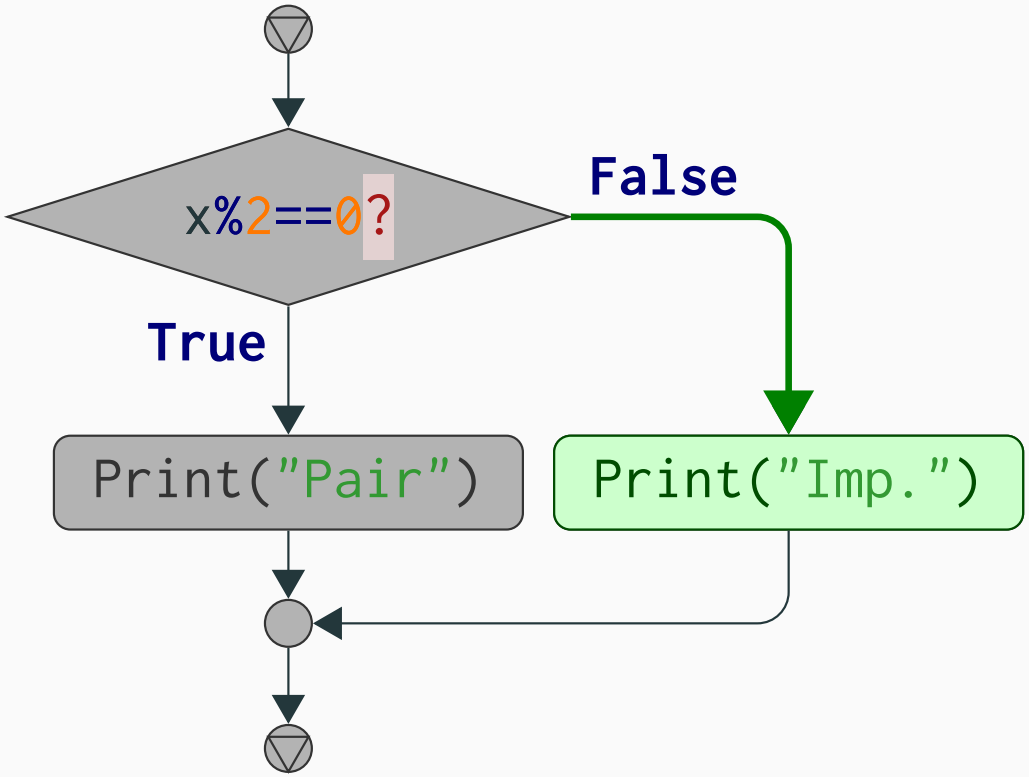


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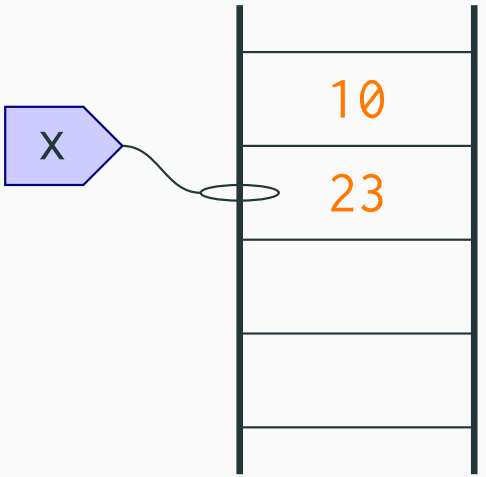

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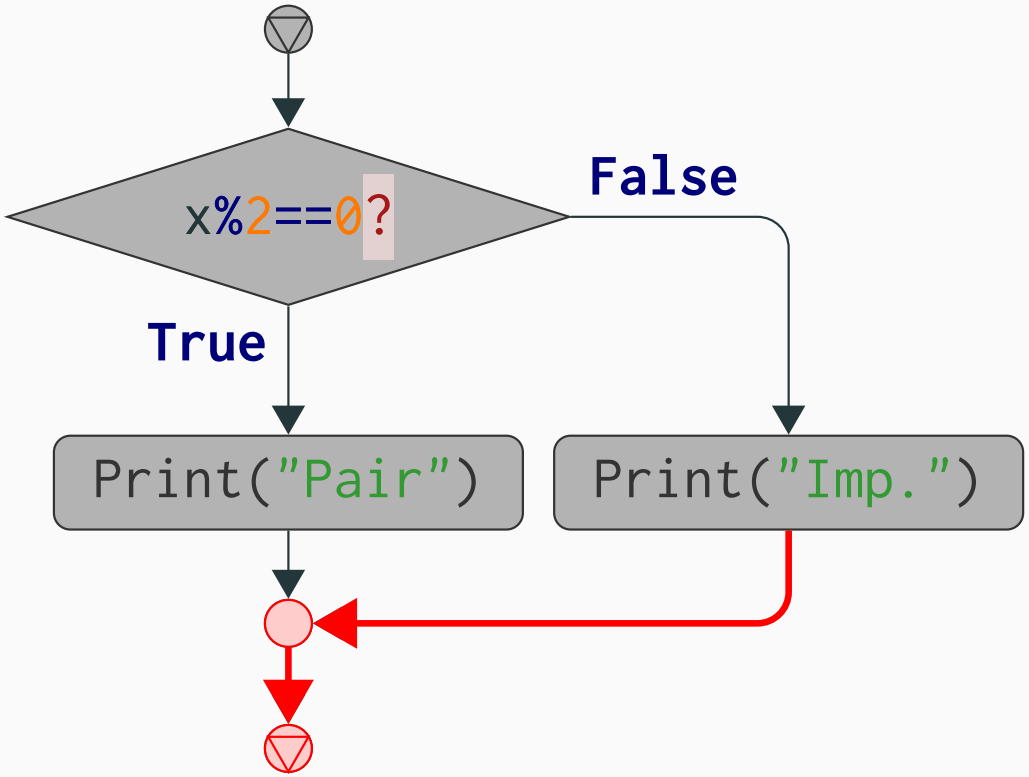


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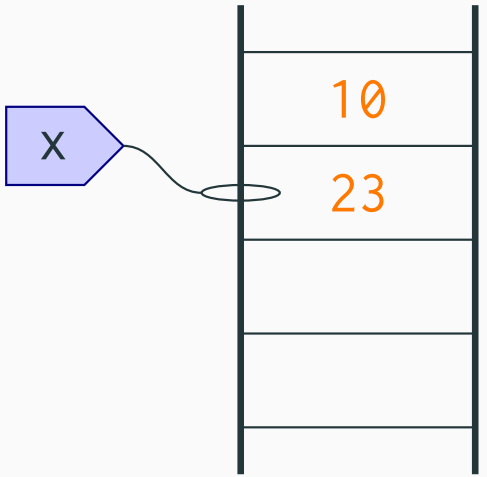
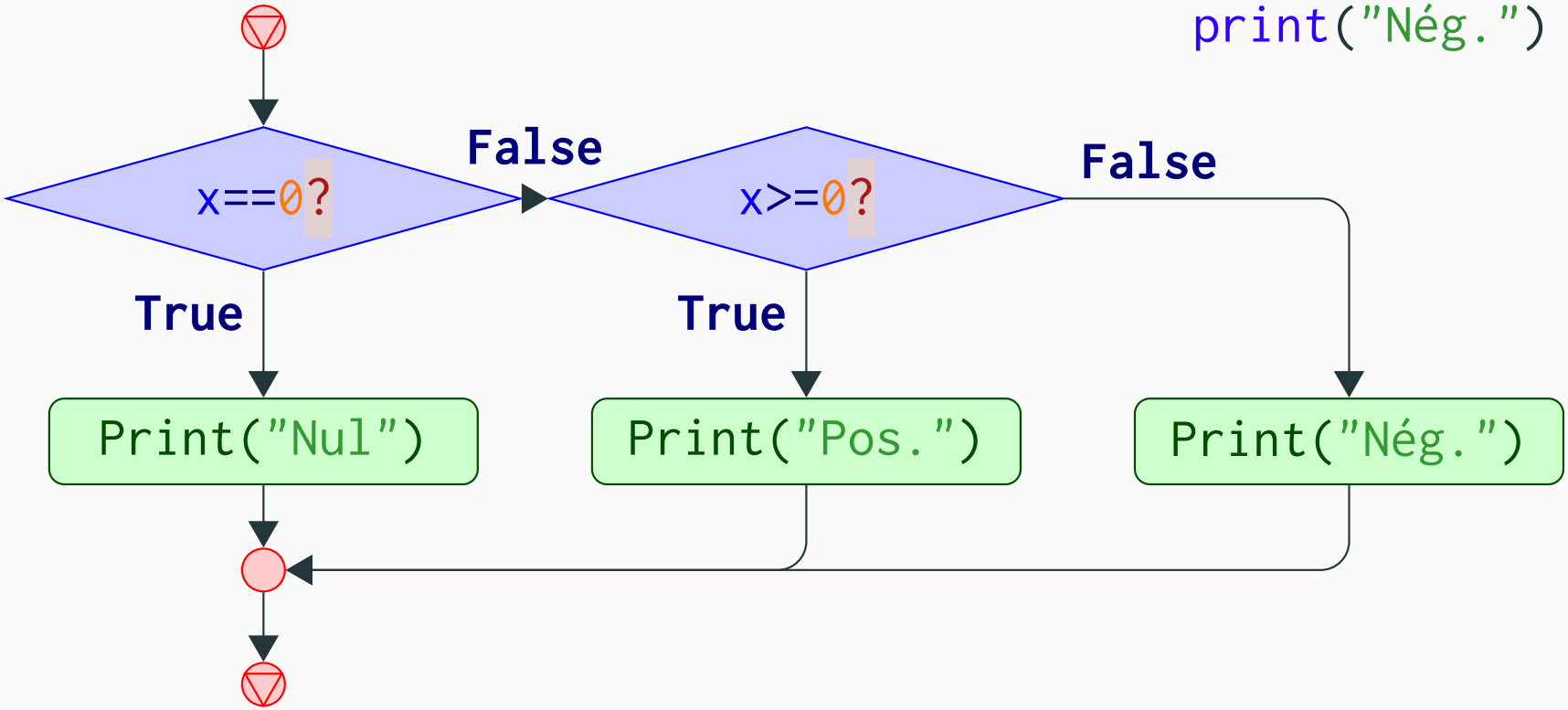
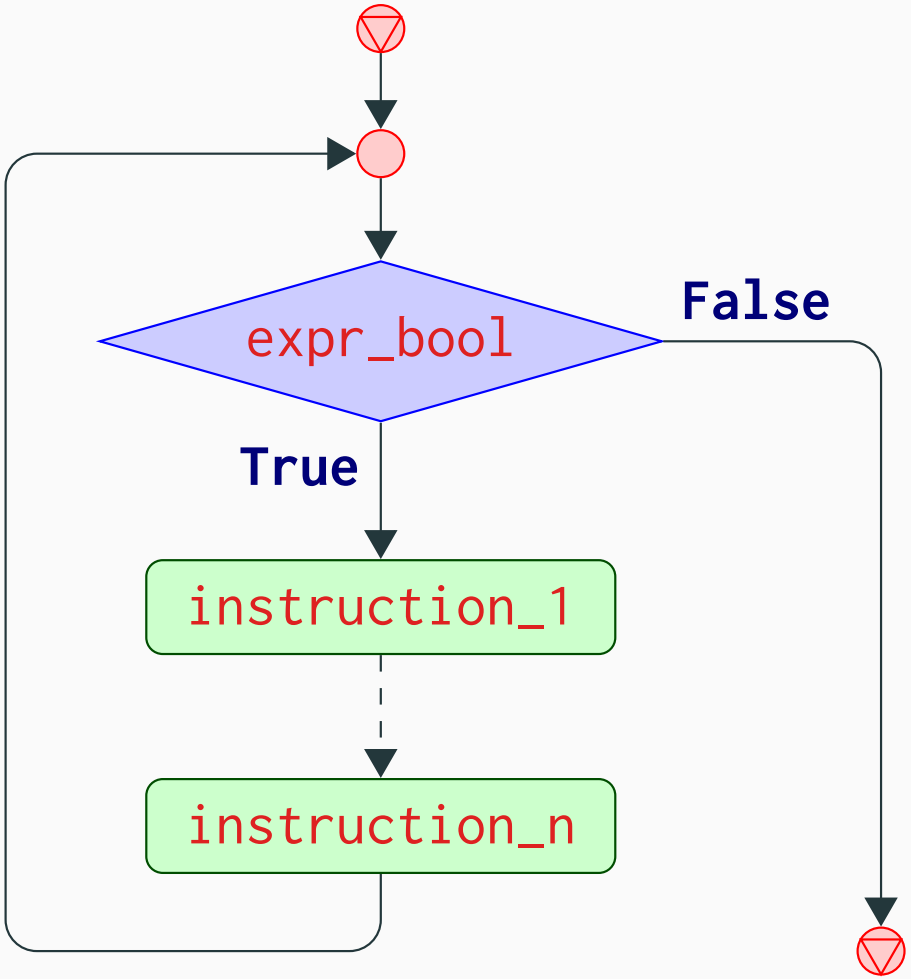


Multiples chemins avec « elif »

```
if x==0 :
    print("Nul")
elif x>=0 :
    print("Pos.")
else :
    print("Nég.")
```



Structure « while »




```
while expr_bool :
    instruction_1
    ...
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...
```
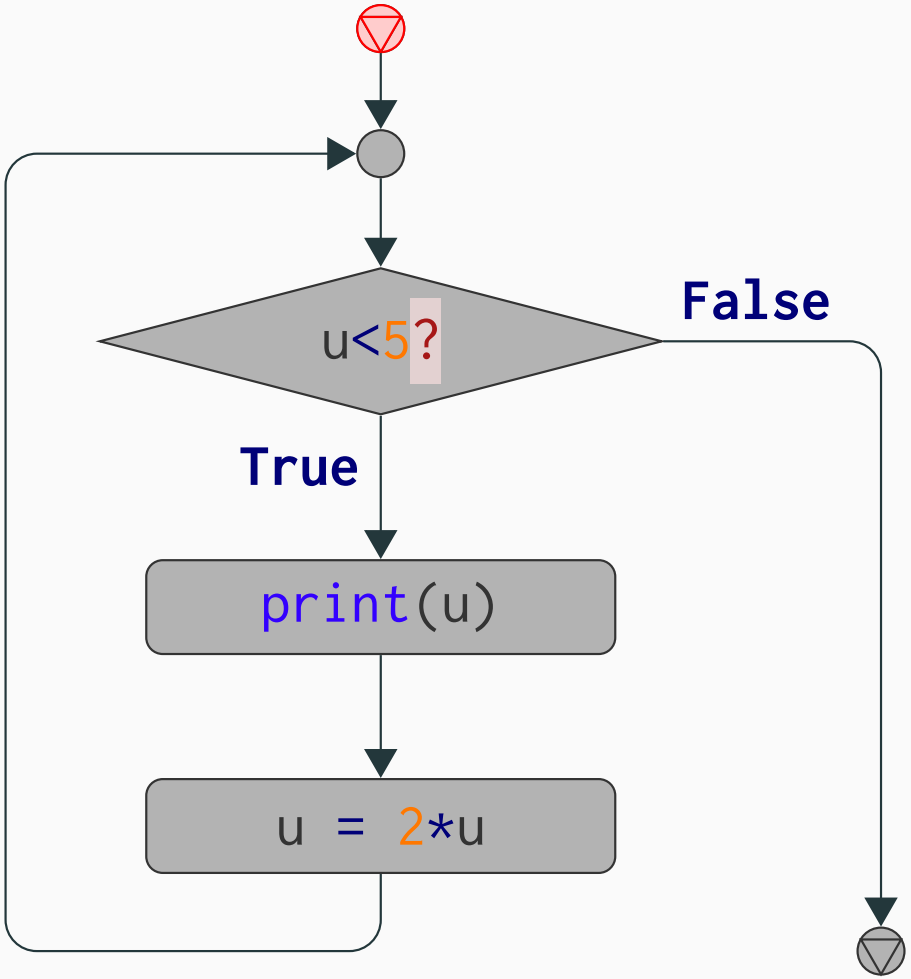

Exemple




```
while u<5 :
    print(u)
    u = 2*u
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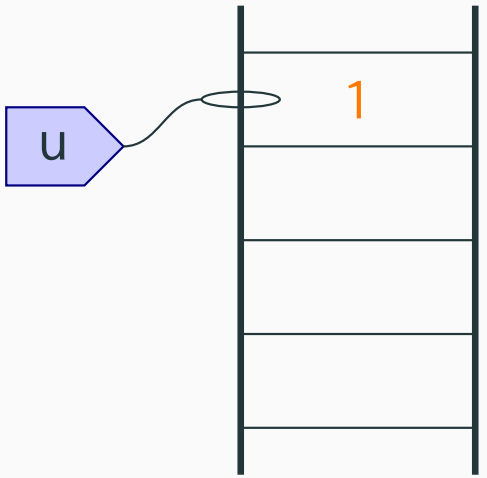

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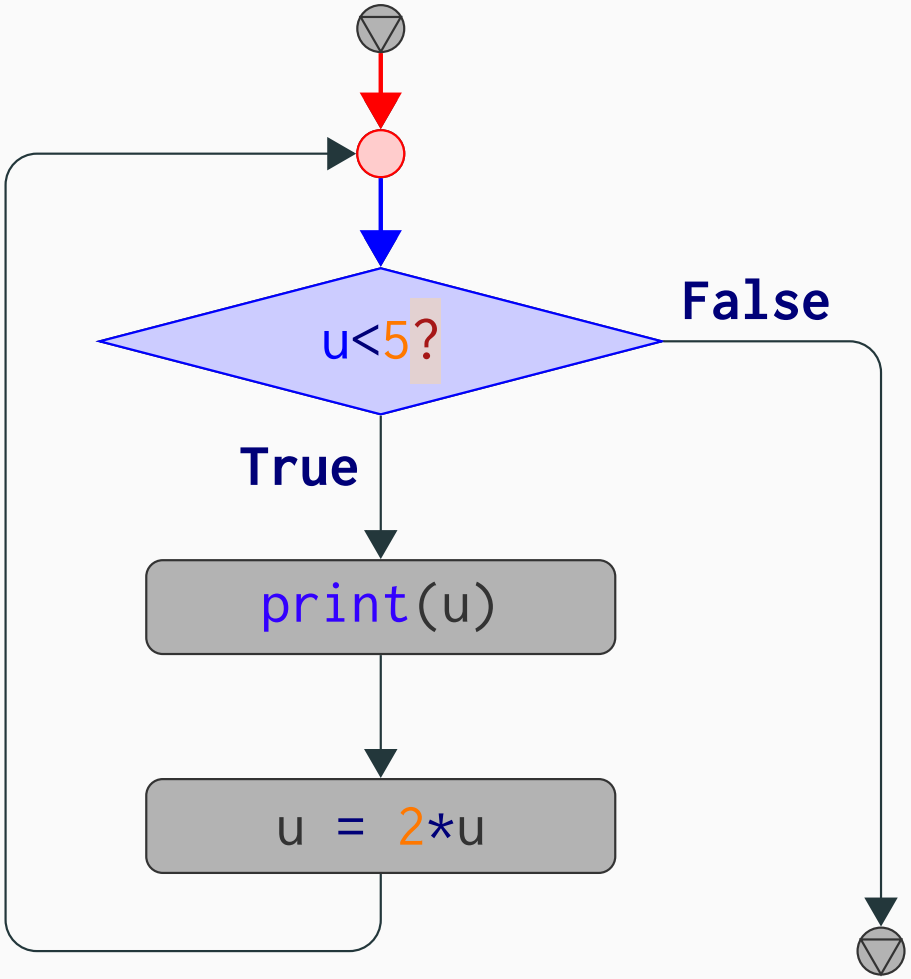


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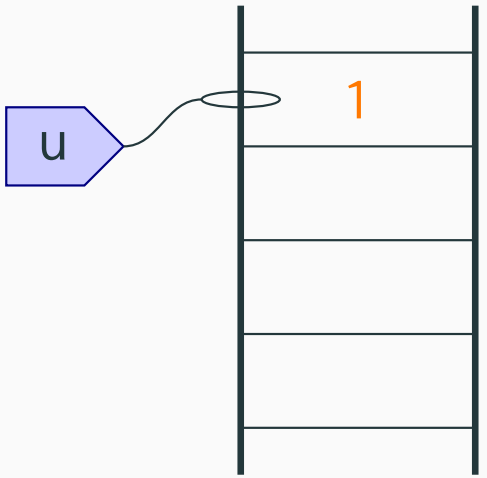

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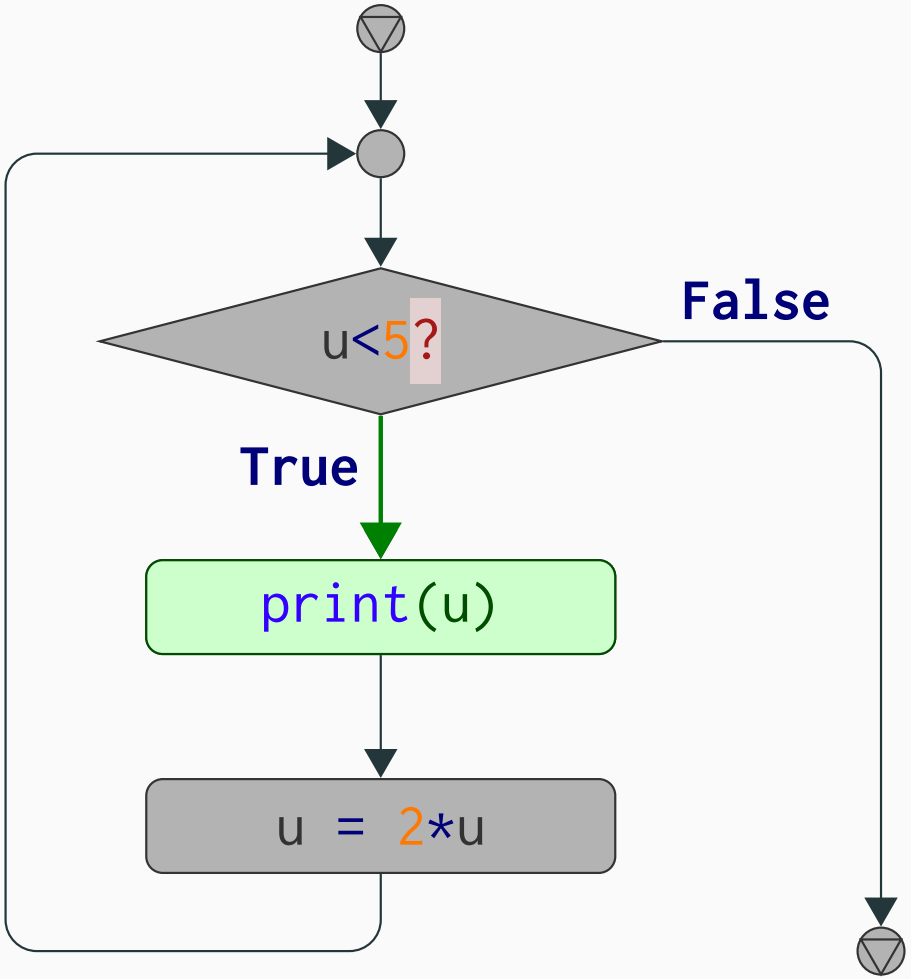


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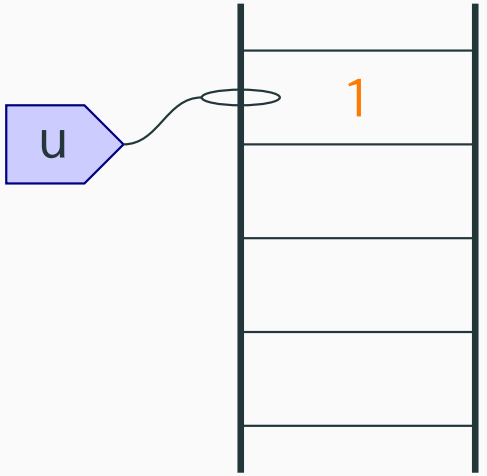

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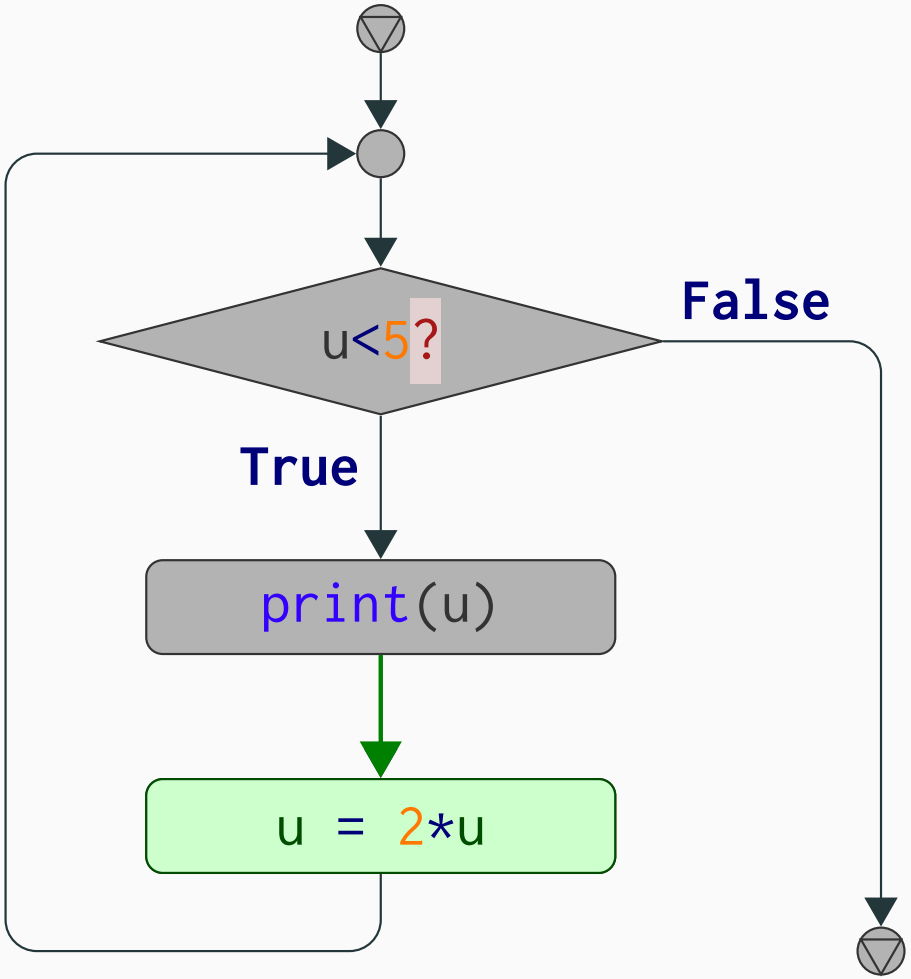


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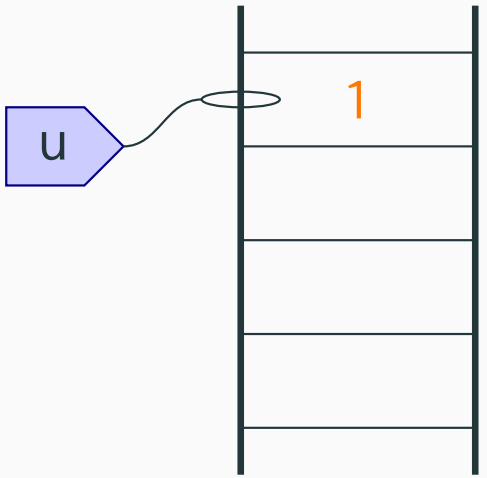

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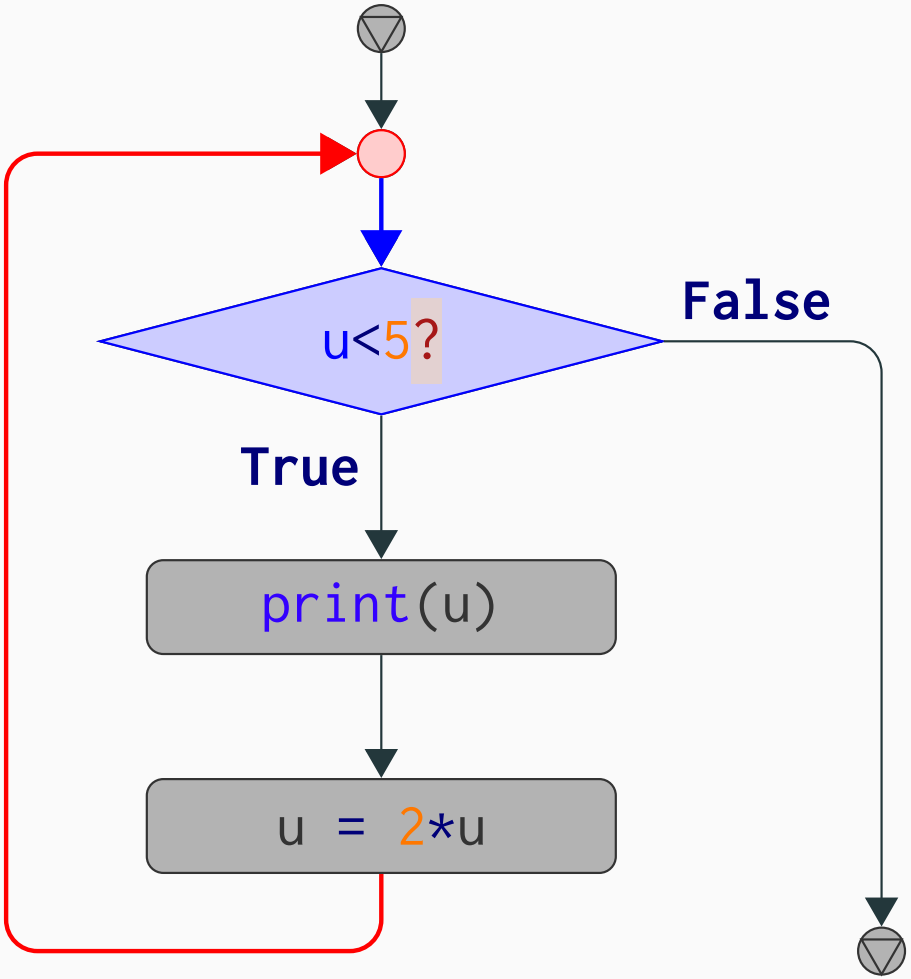


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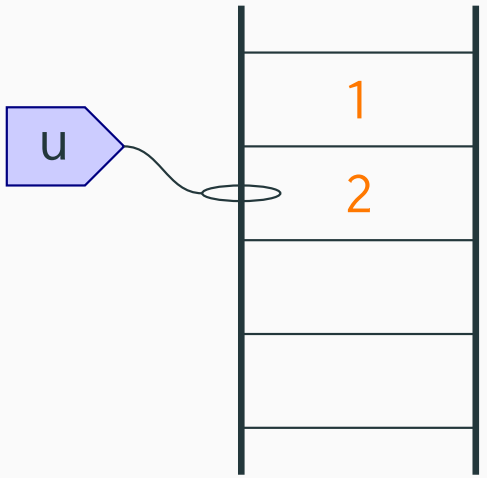

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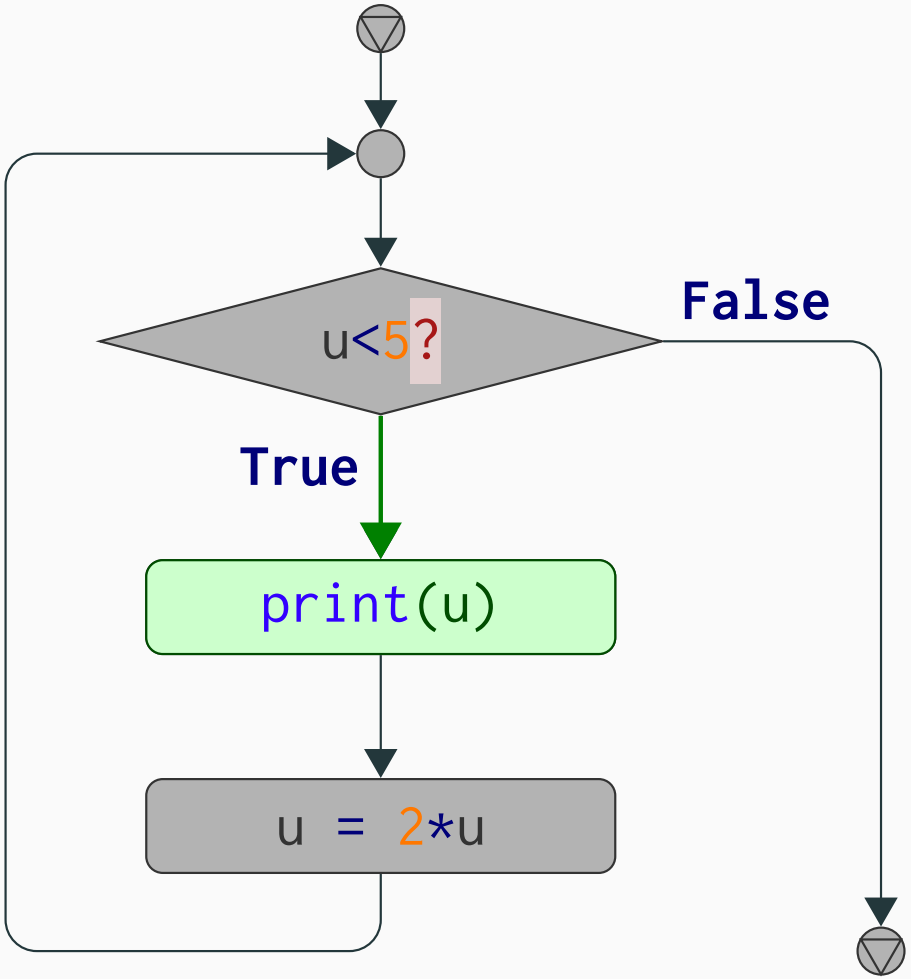


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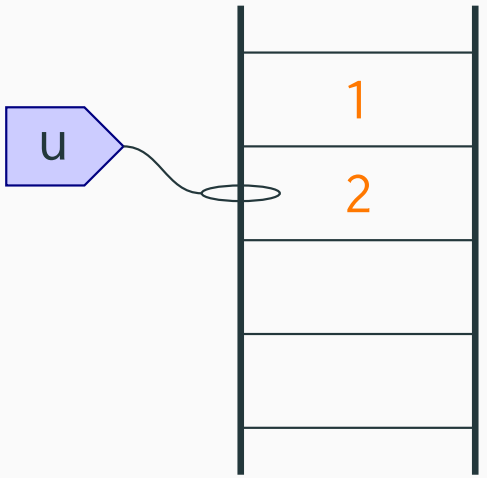

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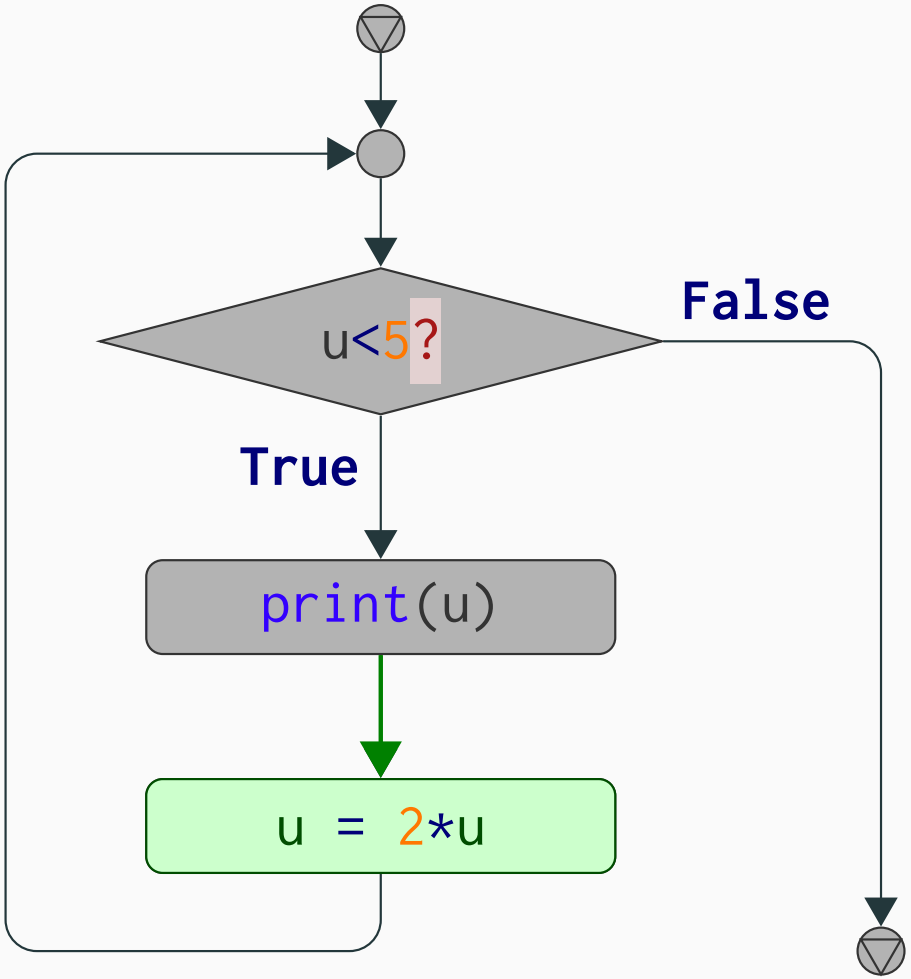


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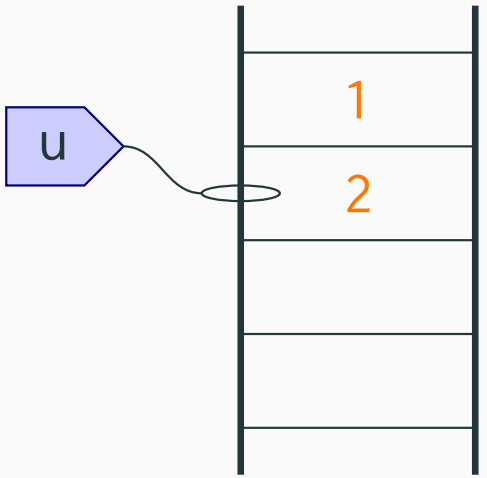

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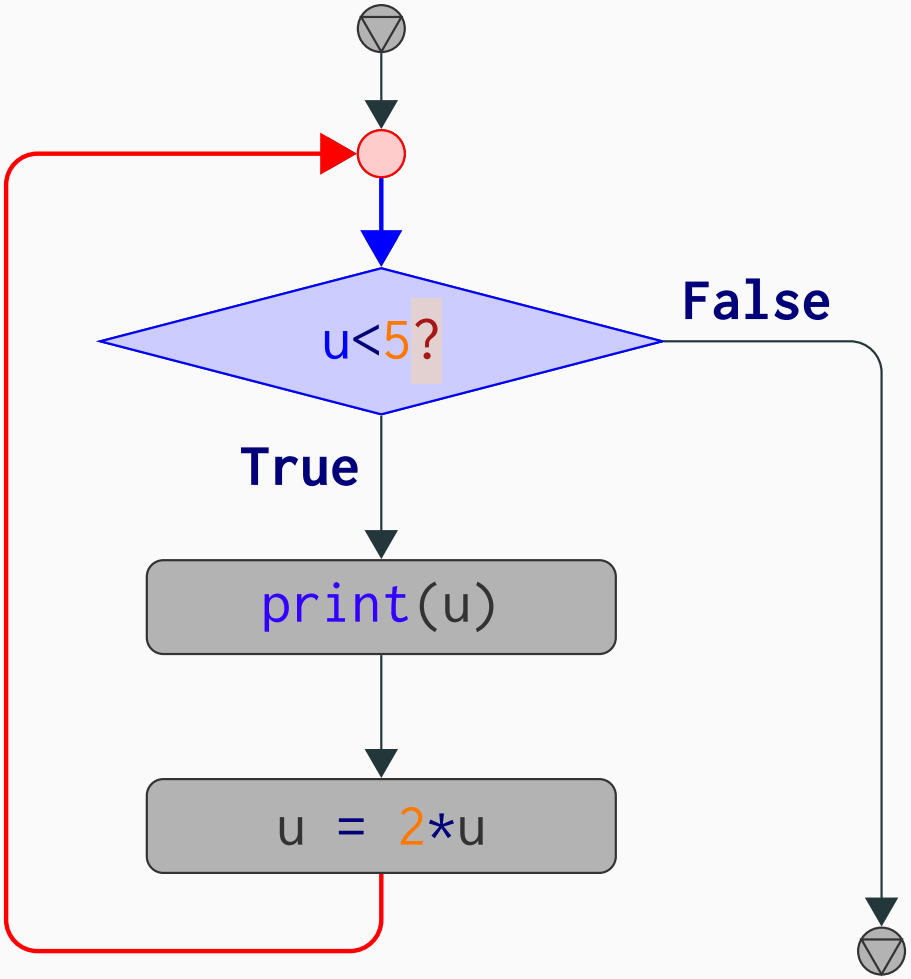


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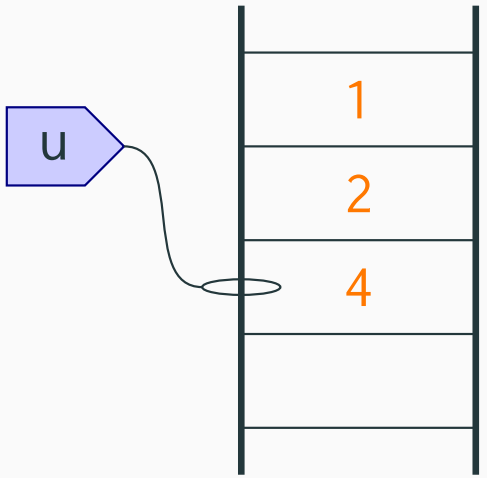

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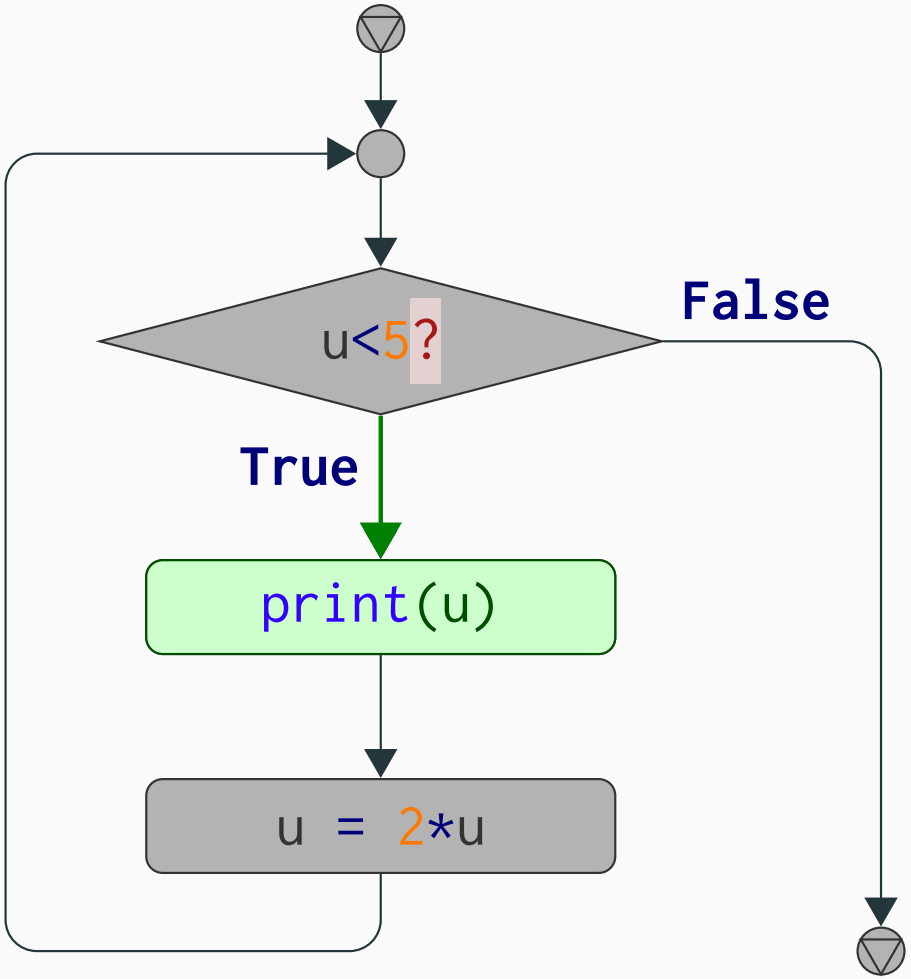


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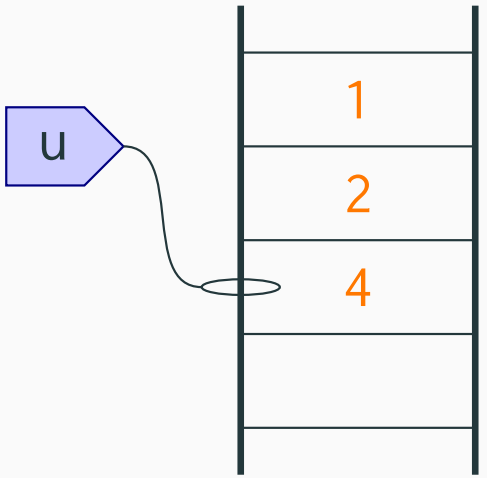

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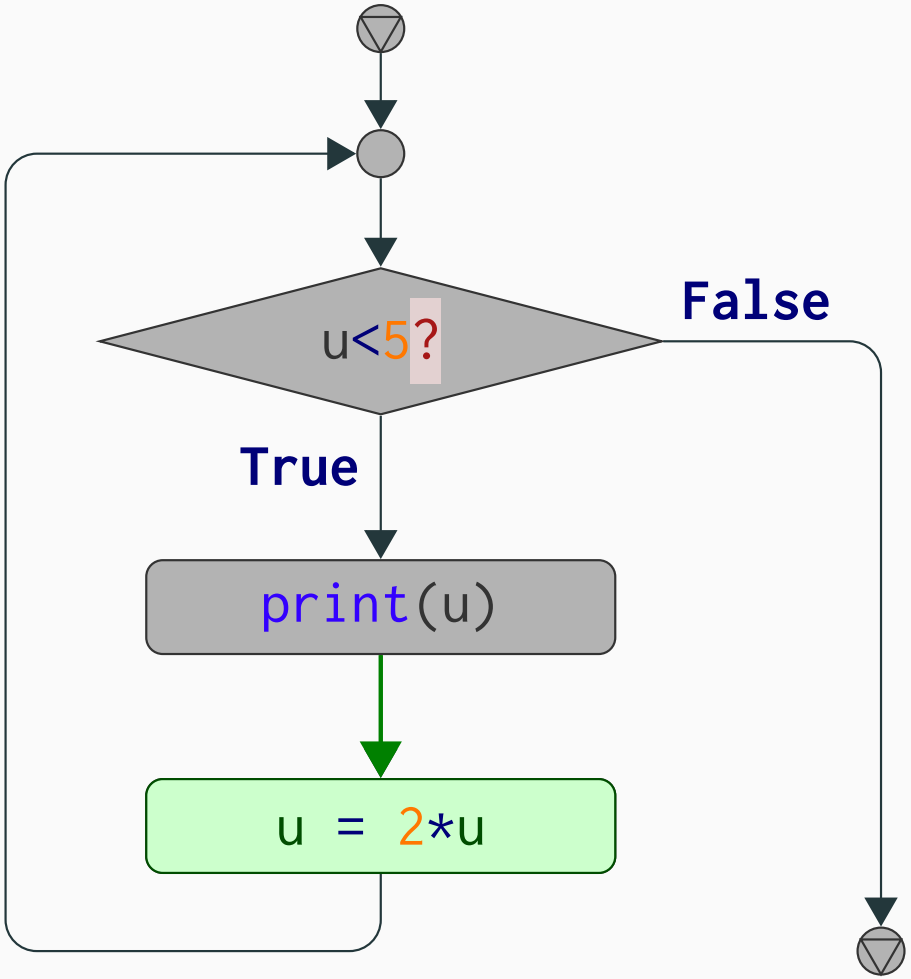


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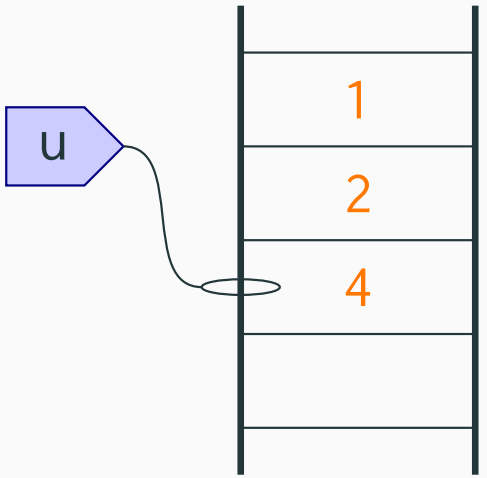

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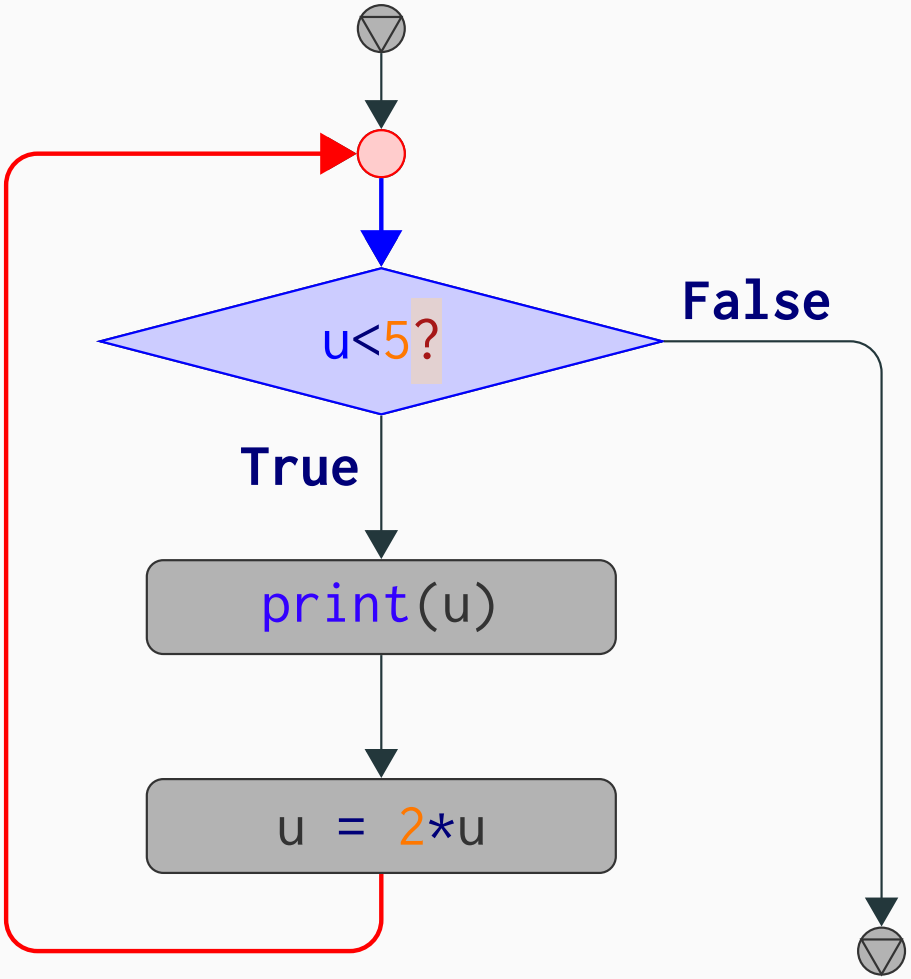


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    u = 2*u
```
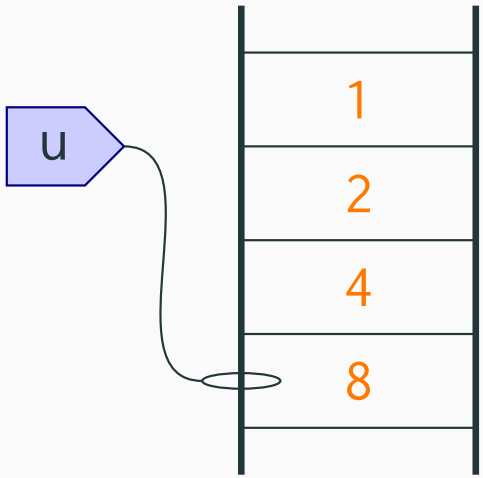
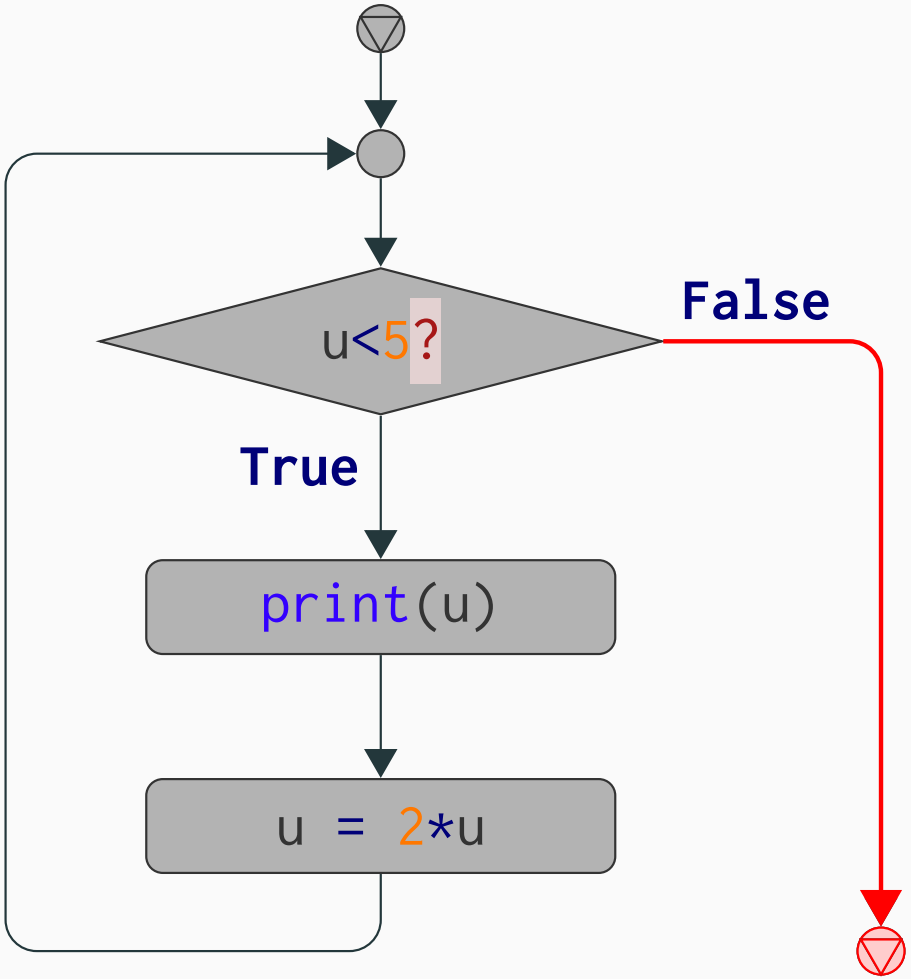
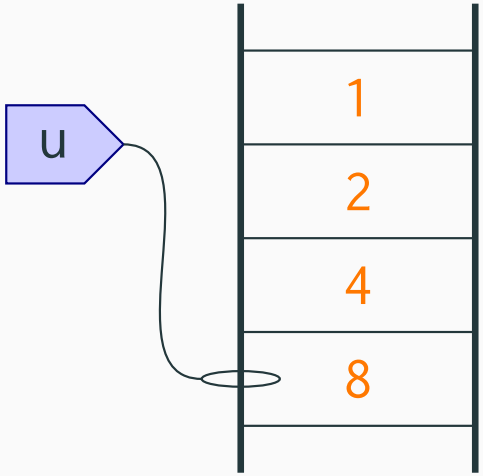



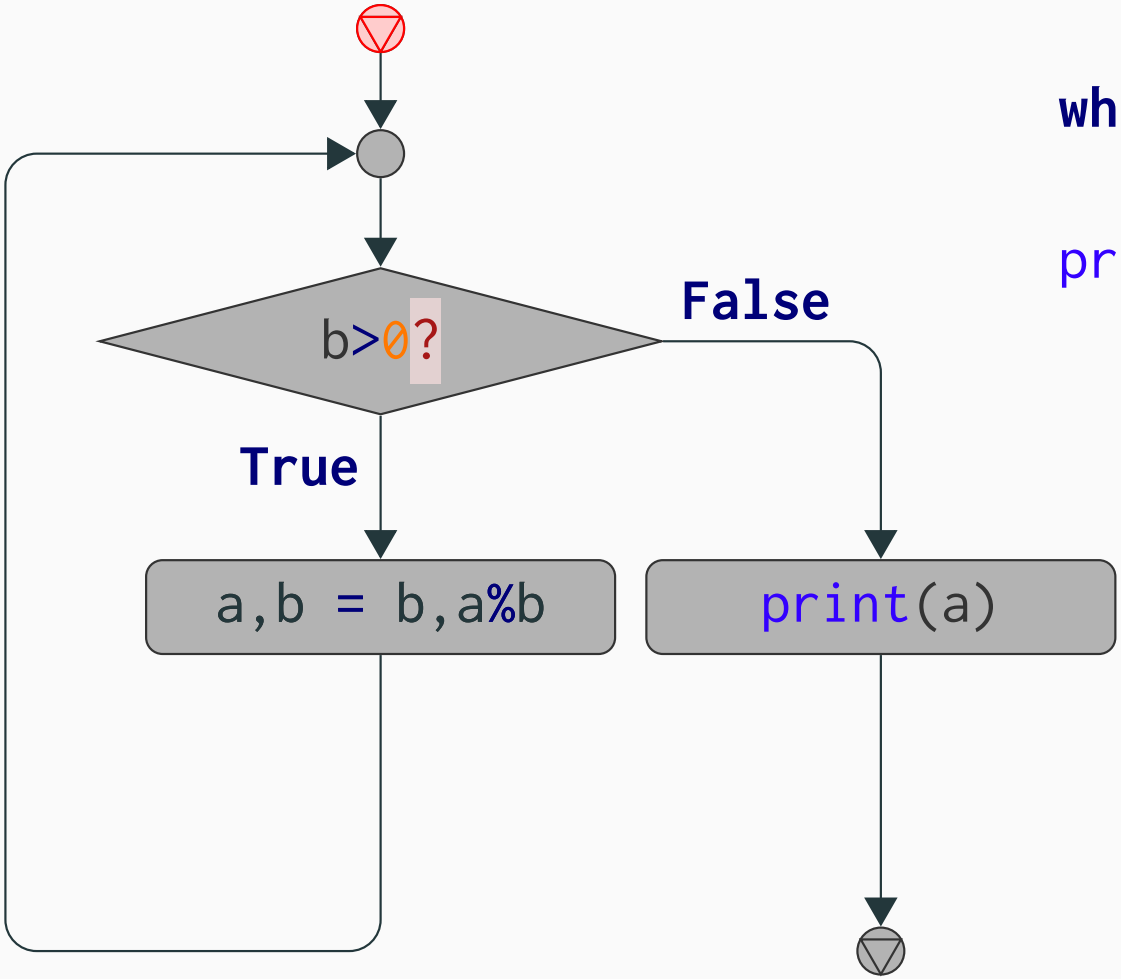
Exemple



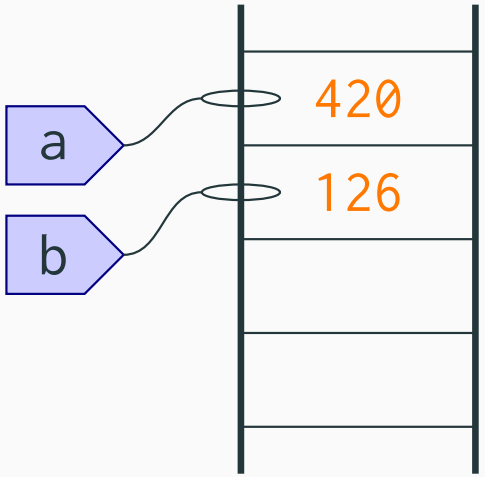

```
while u<5 :
    print(u)
    u = 2*u
```



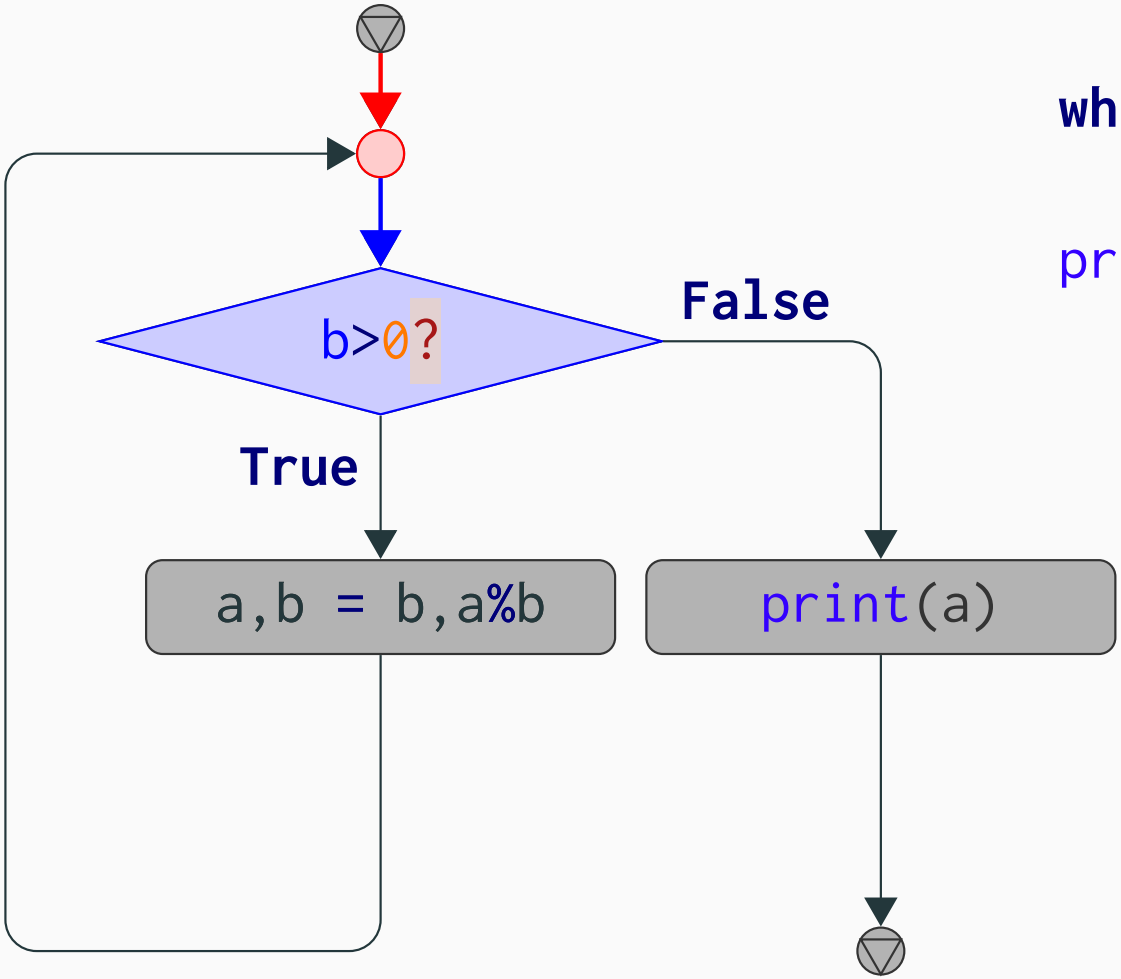
Calcul du PGCD avec l'algorithme d'Euclide



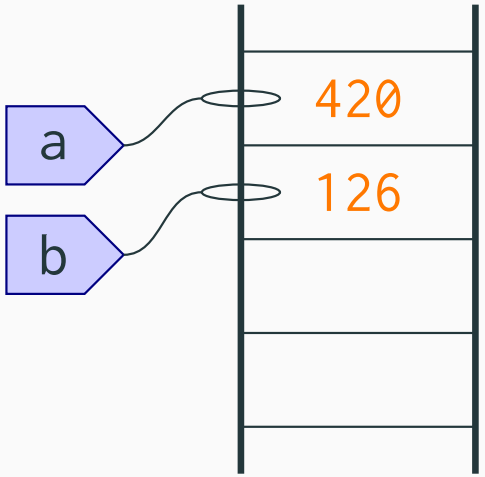

```
while b>0 :
    a,b = b,a%b
print(a)
```



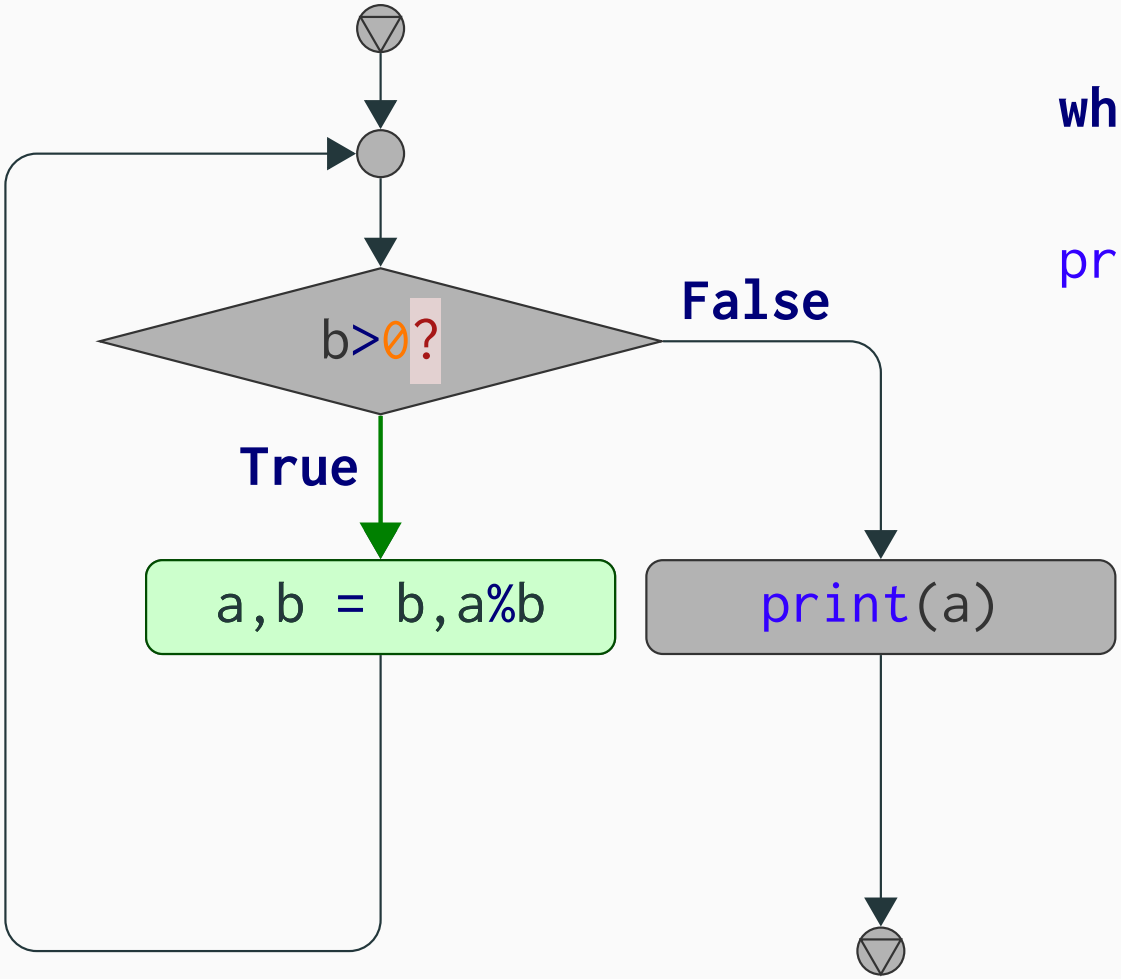
Calcul du PGCD avec l'algorithme d'Euclide



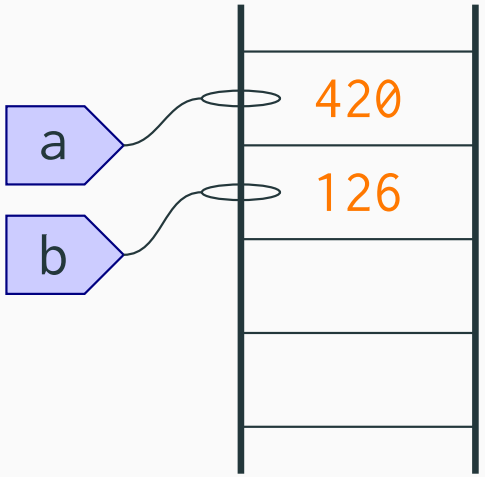

```
while b>0 :
    a,b = b,a%b
print(a)
```



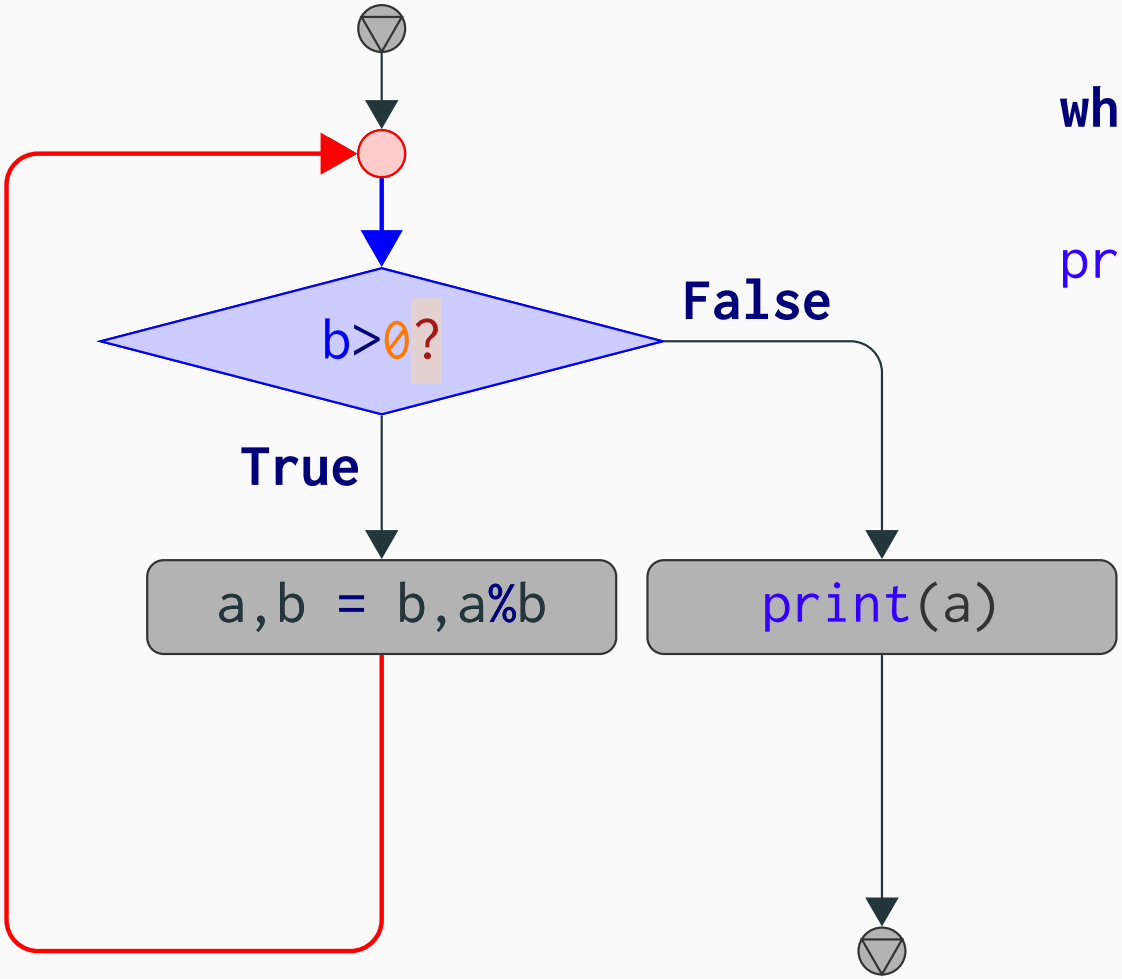
Calcul du PGCD avec l'algorithme d'Euclide



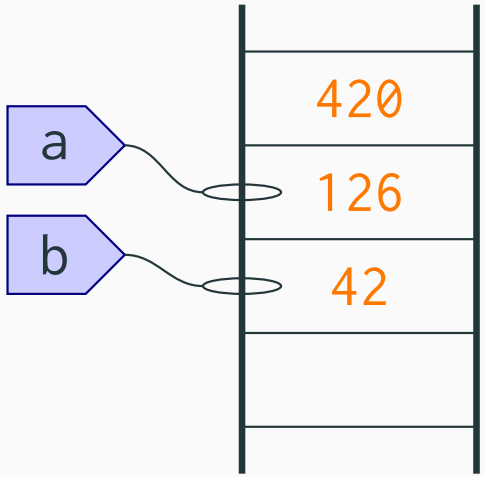

```
while b>0 :
    a,b = b,a%b
print(a)
```



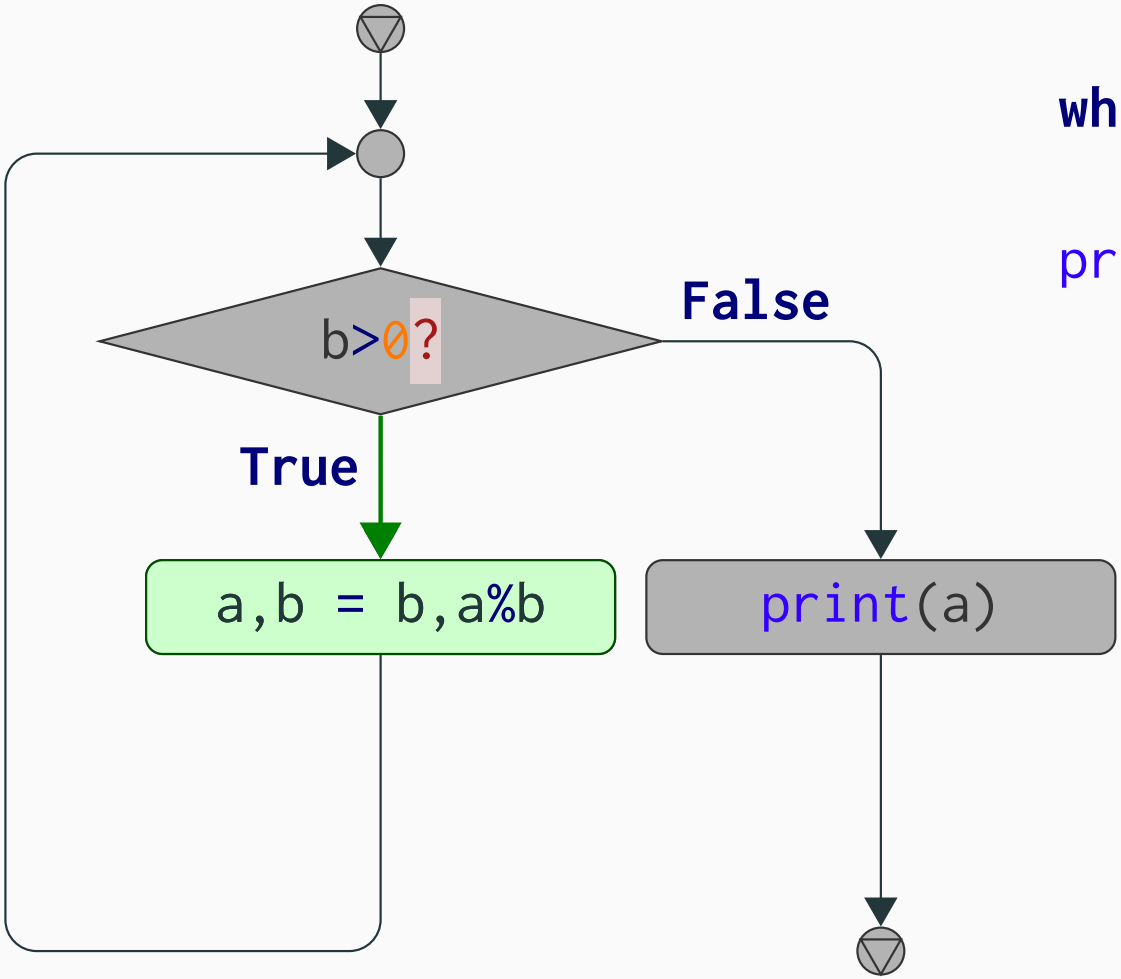
Calcul du PGCD avec l'algorithme d'Euclide




```
while b>0 :
    a,b = b,a%b
print(a)
```



Calcul du PGCD avec l'algorithme d'Euclide




```
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```
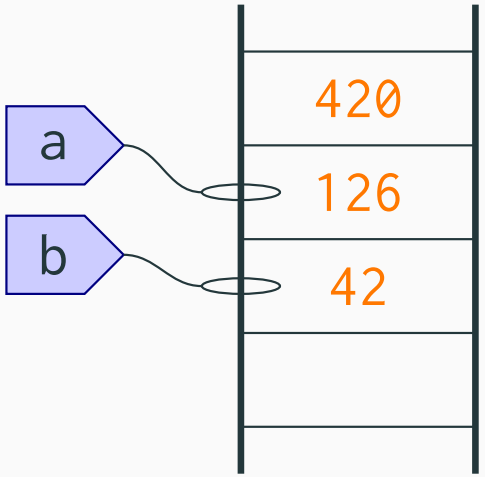
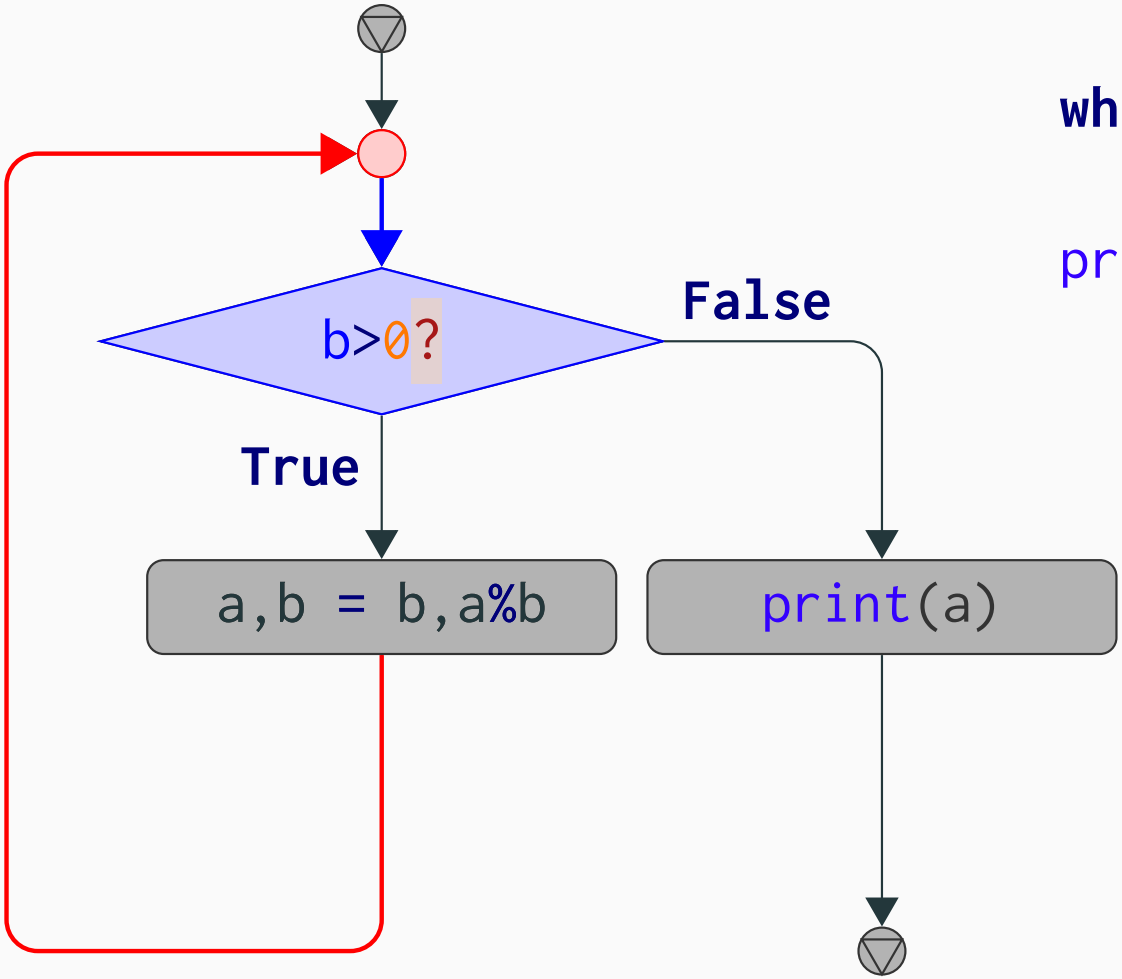



Calcul du PGCD avec l'algorithme d'Euclide




```
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```
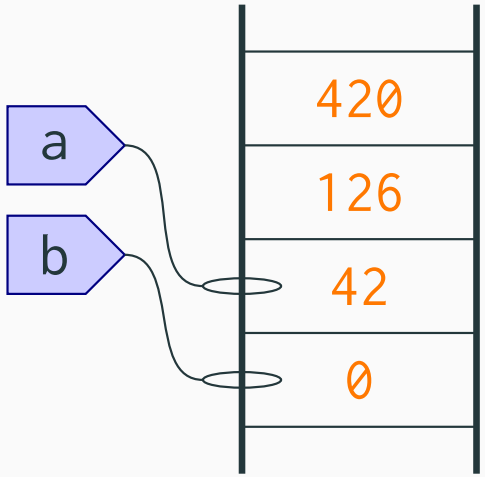
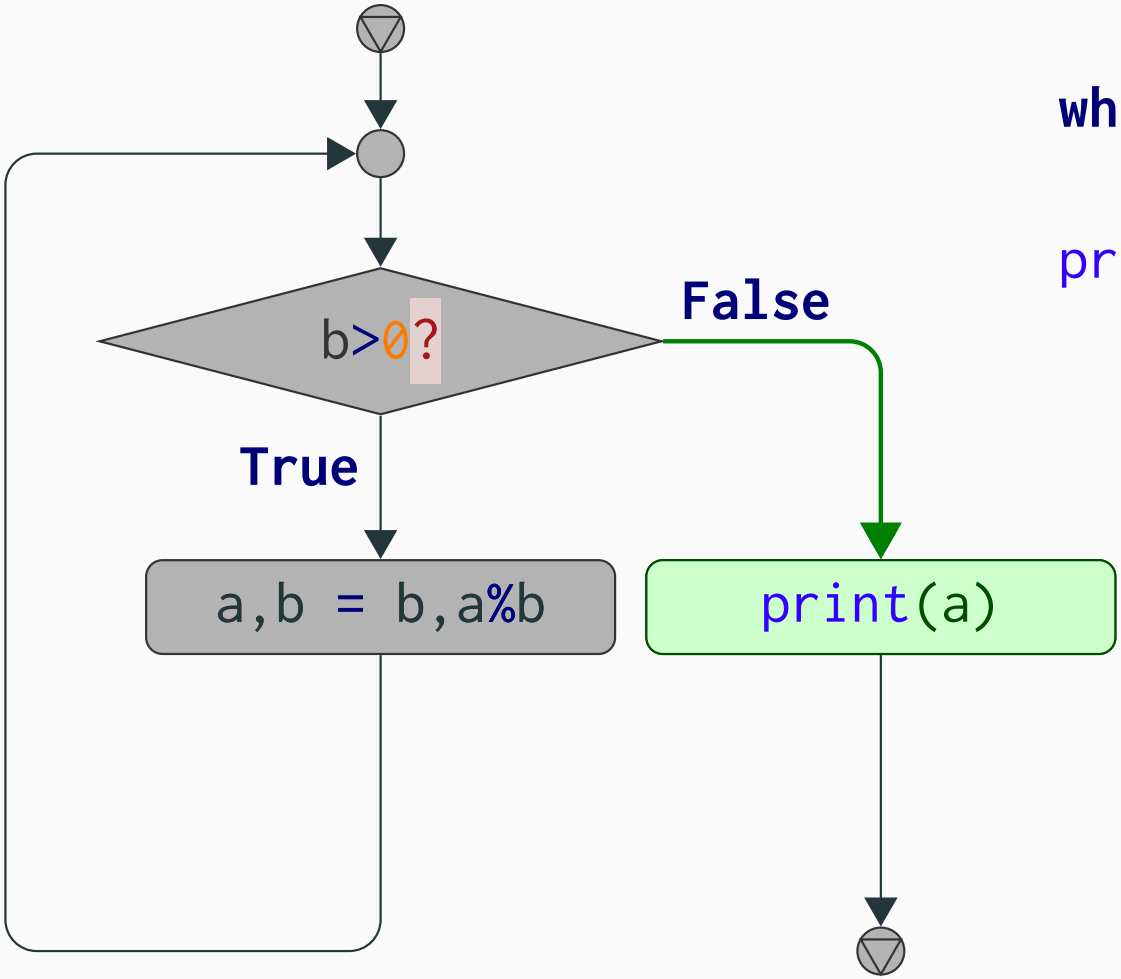
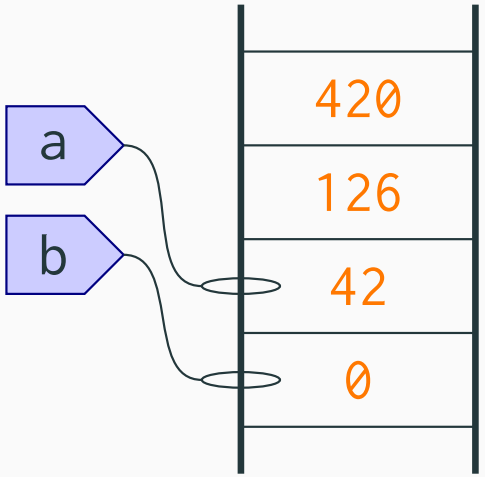



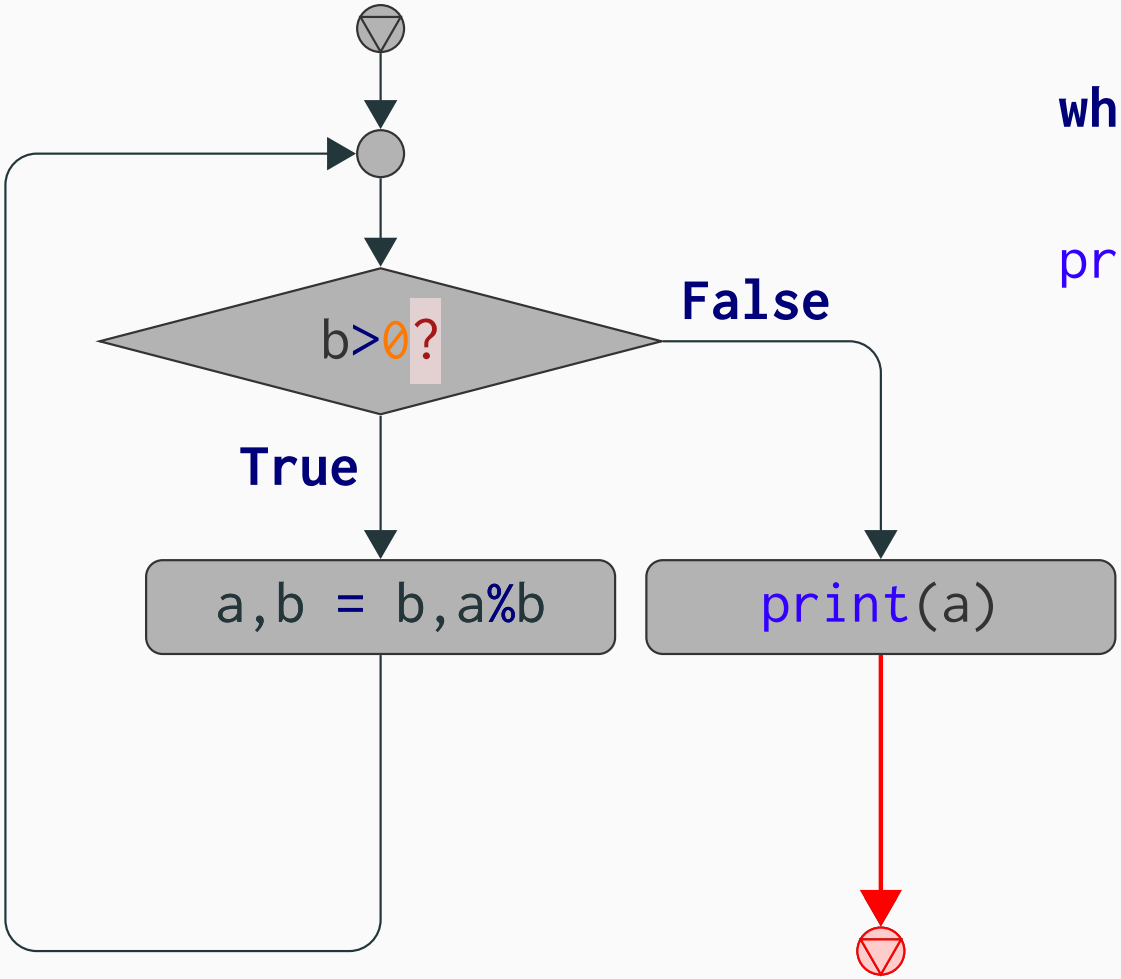
Calcul du PGCD avec l'algorithme d'Euclide




```
while b>0 :
    a,b = b,a%b
print(a)
```



Calcul du PGCD avec l'algorithme d'Euclide




```
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```