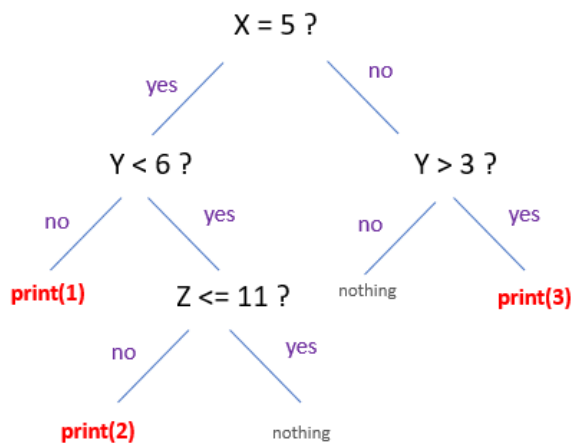# C3-S8 –PRACTICE

EX1
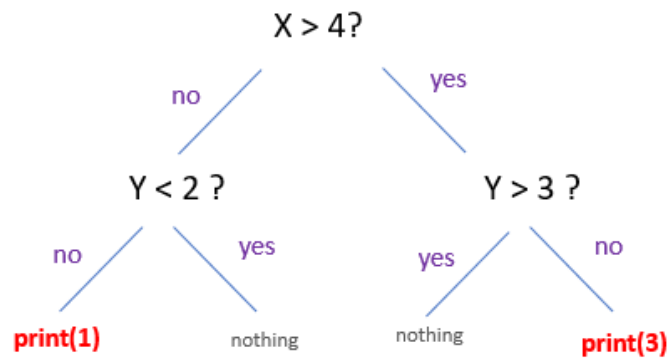Convert this tree to python

```
x=int(input())
y=int(input())
z=int(input())
if x==5:
    if y<6:
        if z>=10:
            print(2)
    else:
        print(1)
else:
    if y>3:
        print(3)
```


EX2
Converts this tree to python

```
X > 4?

    no          yes

  Y < 2 ?        Y > 3 ?

no    yes    yes    no

print(1)  nothing  nothing  print(3)
```

```
x=0
y=0
if x>4:
    if y<3:
        print(3)
    else:
        if y>2:
            print(1)
```

EX3

- Create variable name "**nbRepeat**" and set the values to 5
- Print « Hello World » following variable **« nbRepeate »** times

It should print this:

```
Hello World
Hello World
Hello World
Hello World
Hello World
```

```
nbRepeat=5

for i in range(nbRepeat):
    print("Hello World")
```

EX4

Create variable name "**number**" set the value to 20

As long as when the number still greater than 5

- Print "**number**"
- Increment number of -2

It should print this:

```
20
18
16
14
12
10
8
6
```

```
number=20

while number>5:
    print(number)
    number -=2
```

EX5

- Create 2 variables
  - name = "Tola"
  - age = 21

  You shall write the value of those 2 variables with some text, as show on the result

It should print this:

My name is : Tola, I am : 21 years old !

```
name="Tola"
age=21
print("My name is",name,",","I am:",age,"years old!")
```

EX6

Get the number **entered from keyboard** and store it into a variable **userMessage**

- If the **userMessage** is lower than 0, display "Negative Number!"
- Else display "Positive Number"

Example:

If user enters -1:

    Negative Number!

If user enters 5:

    Positive Number!

```
userMessage=int(input("enter number here:"))
if userMessage <0:
    print("Negative Number!")
else:
    print("Positive Number!")
```

EX7

Example: To see   "Dog"   number must be in the range: **] –infinity, 25[**

```
if number < 25 :
```

```
    print(« Dog »)
elif number <= 30 :
    print(«Cat»)
else :
    print(«Cow »)
```

Q1: What must be the range of number to see "Cat"?

Q2: What must be the range of number to see "Cow"?

```
number=int(input("enter number here:"))
if number<25:
    print("Dog")
elif number>=25 and number<=30:
    print("Cat")
else:
    print("Cow")
```

EX8
What will be print if value equal to 10?

```
if value >= 5 :
    print(« Apple »)
elif value <= 10 :
    print(«Banana»)
```

Answer: Apple

EX9
What will be print if value equal to 10?

```
if value >10 :
    print(« Red »)
if value <= 10 :
    print(«Blue»)
```

Answer: Blue

EX9

- Enter a string **text** in the console
- **n** is the length of **text**
- Print **n** times of the character "X"

Case 1:

```
>test
>X X X X
```

Case 2:

```
>tryagain
>X X X X X X X X
```

```python
text=input("enter text here:")
n=""
for i in range(len(text)):
    print("x","",end="")
```

EX10

-Enter a number **n** in the console
-Print a reversed triangle of "X"

Exemple:

```
>5
>X
>X X
>X X X
>X X X X
>X X X X X
```

```
>2
>X
>X X
```

```python
number=int(input("Enter here:"))
text=""
for i in range(number):
    text=text+"x"
    print(text)
```

EX11

-Enter a number **n** in the console
-Print a reversed using numbers (see example)

Example:

```
>5
>12345
>1234
>123
>12
>1
```

```
>2
>12
>1
```

```python
n=int(input())
for r in range(n,0,-1):
    for c in range(1,r+1):
        print(c,end="")
    print("\r")
```

EX12

- Enter a string **word** in the console
- Print "X" on the console (see example)

Exemple:

```
>hello
>XXXXX
```

```
>testing
>XXXXXXX
```

```python
text=input("enter here:")
for i in range(len(text)):
    print("x",end="")
```

EX13

- Enter a string **word** in the console
- Enter the number **n** in the console
- If **word** equal to "good" and the number between 7 and 15, it's will be print "It's good"
- If **word** equal to "bad" and the number lower than 7 or greater than 15, it's will be print "It's bad"

Exemple:

```
>good
>10
>It's good
```

```
>bad
>6
>It's bad
```

```python
text=input("enter text here:")
number=int(input("enter number here:"))
if text=="good" and number>=7 and number<=15:
    print("It's good")
elif text=="bad" and number<7 or number>15:
    print("It's bad")
```

EX14

- Enter a number **n** in the console
- Print a reversed using numbers (see example)

Exemple:

```
>5
>1
>2 3
>4 5 6
>7 8 9 10
>11 12 13 14 15
```

Example :

```
>3
>1
>2 3
>4 5 6
```

```python
n=int(input())
result=1
for i in range( 1, n+1):
    for d in range(1,i,+1):
        print(result,end=" ")
        result +=1
    print("\r")
```