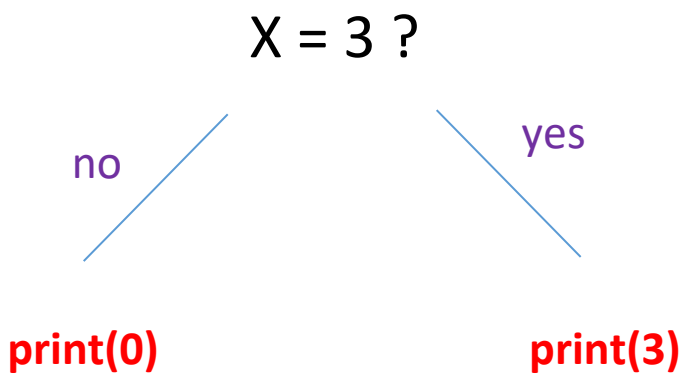
BOOLEAN

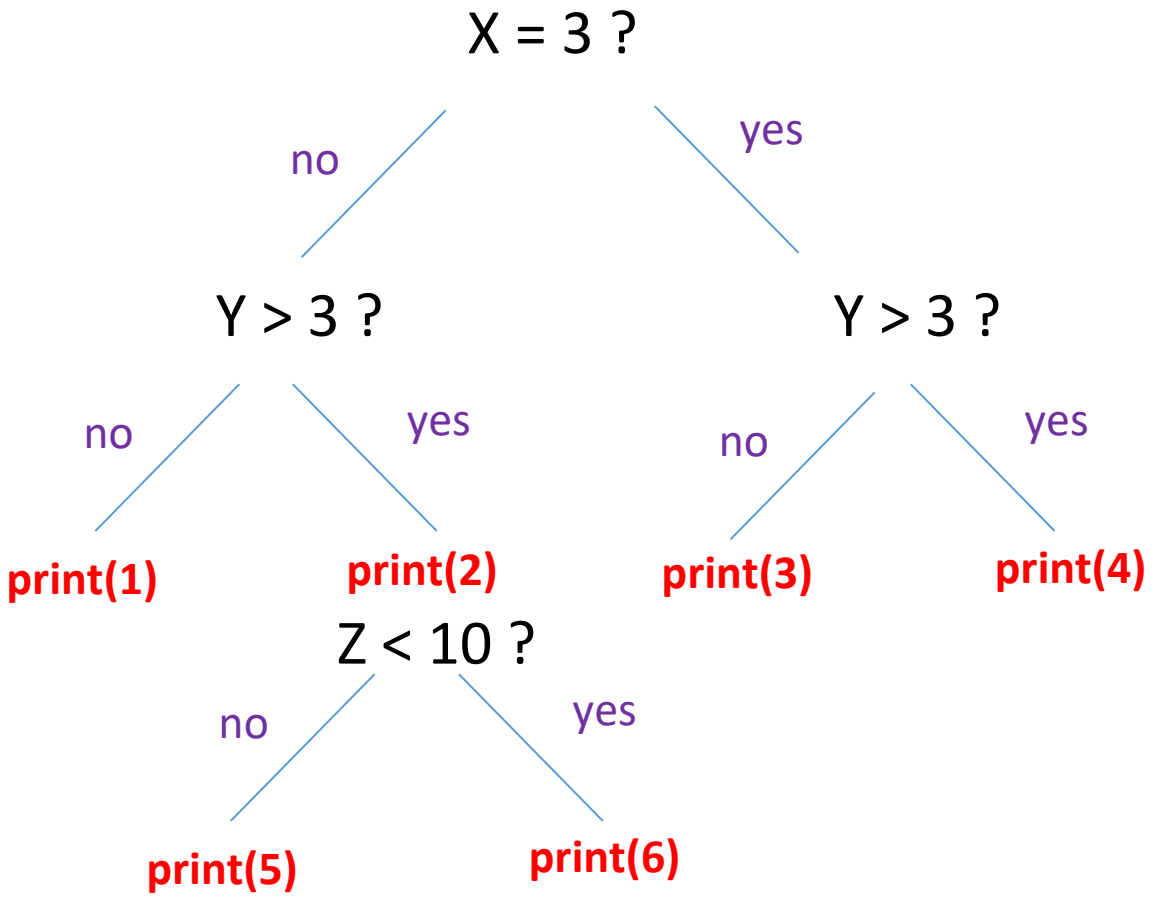
#1



Code this tree in Python

```
x=3
if x==3:
    print(3)
else:
    print(0)
```

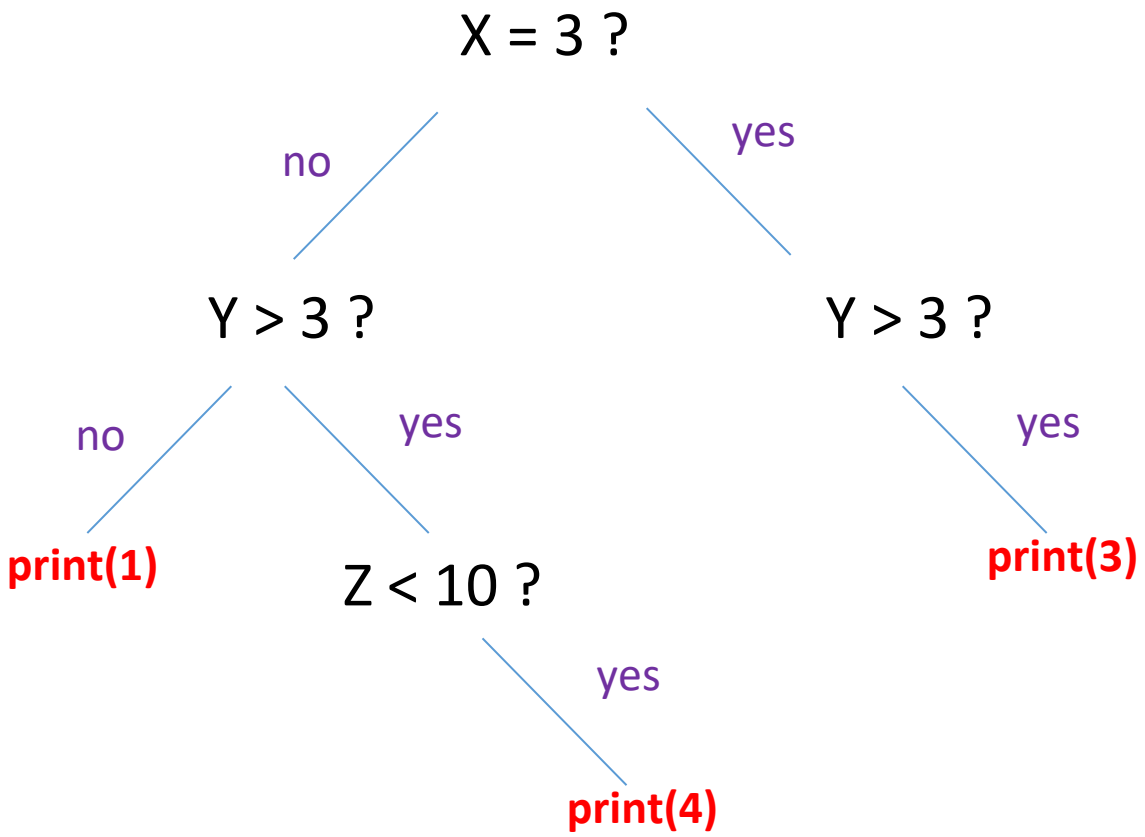
#2



Code this tree in Python

```python
x=3
if x==3:
    if y>3:
        print(4)
    else:
        print(3)
else:
    if y>3:
        print(2)
        if z<10:
            print(6)
        else:
            print(5)
    else:
        print(1)
```

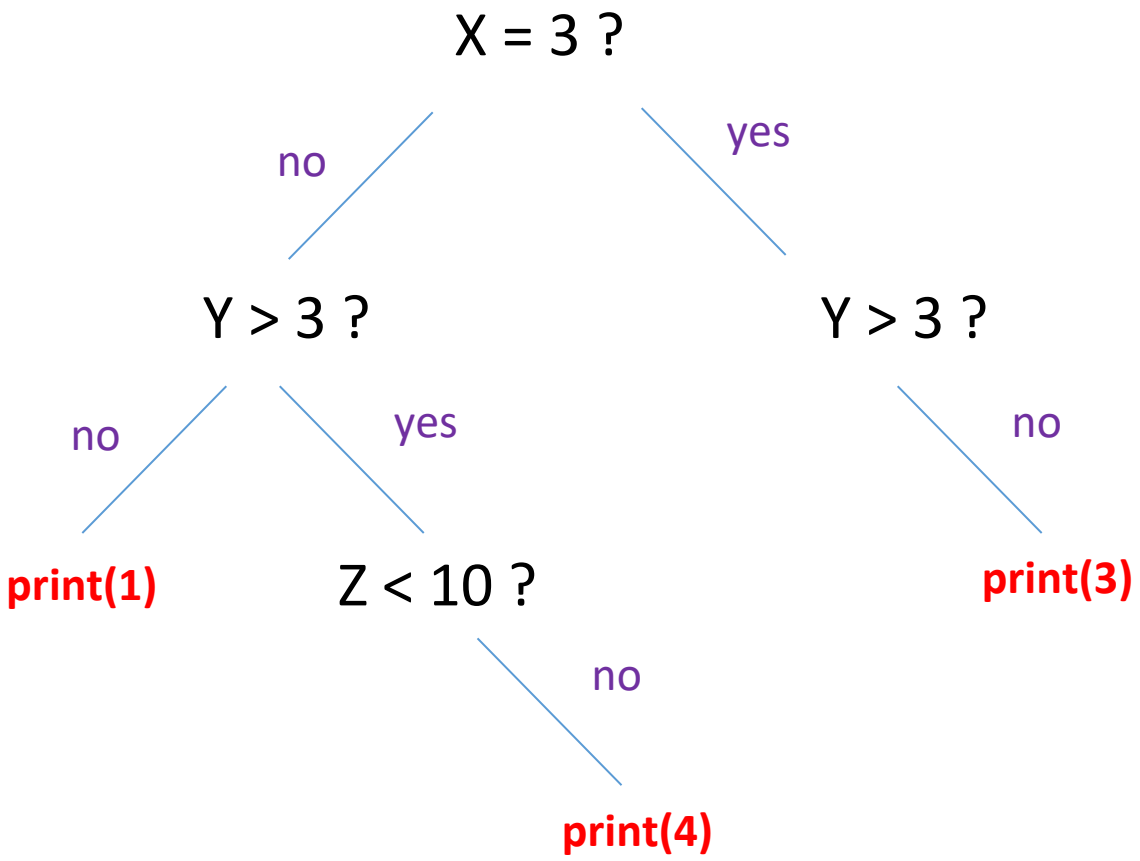
#3



Code this tree in Python

```
x=3
if x==3:
    if y>3:
        print(3)
else:
    if y>3:
        if z<10:
            print(4)
    else:
        print(1)
```

#4



Code this tree in Python

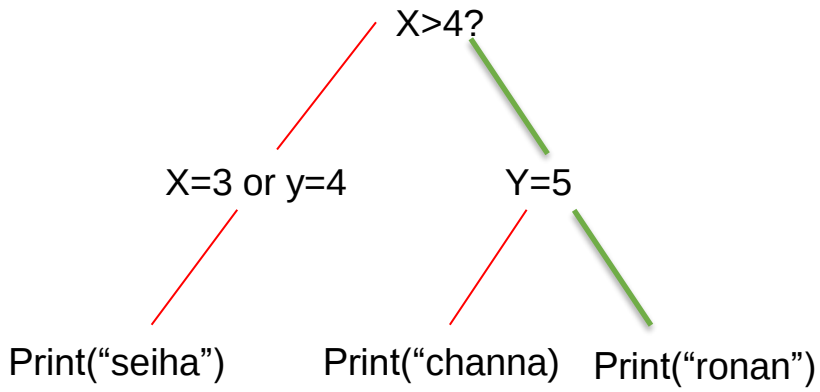
```
x=3
if x==3:
    if y>3:
        print(3)
else:
    if y>3:
        if z<10:
            print(4)
    else:
        print(1)
```

#5

```
if x > 4:
      if y == 5
            print(«ronan»)
      else
            print(«channak»)

else:
      if x == 3 or y == 4
            print(«seiha»)
```

Draw the tree of condition of this code



#6 Write python !!!

```
if x>5 and y==9:
    print(value1)
```

Store in variable “value1” this : `x greater than 5 and y equal to 9`

Store in variable “value2” this : `Y is equal to 1 or 2`

```
if y==1 or y==2:
    print(value2)
```

Store in variable “value3” this : `Z is one of the following 5, 7, 9`

```
if z==5 and z==7 and z==9:
    print(value3)
```

#7 Write python !!!

Write a program that say "valid" if a number entered by keyboard
if **lower than 0 or between 10 and 15**

You must use 2 variable :

- one to store if number of lower than 0
- one to store if between 10 and 15

```
x=int(input("Enternumberx"))
y=int(input("Enternumbery"))
if x==0:
    print("Enternumberx")
if y>10 and y<15:
    print("Nothing")
else:
    print("Enternumbery")
```

#8 Write python !!!

1 - Enter a number

2 - Display:

“**to low**” if the number displayed is lower than 1

“**Good job**” if the number is equal to 10

“**To high**” is the number is greater than 10

```
x=0
y=10
z=15
if x<1:
    print("to low")
    if y>=10:
        print("Good job")
    if z>10:
        print("To high")
```

You must use 3 boolean variables

IF – ELIF – ELSE

Exercise 1

Q1 What will be the result if x is equal to 5 ?

Answer: **print(“red”)**
print(“blue”)

```
if x > 4:
    print("red")
if x < 7:
    print("blue")
```

Q2 What will be the result if X is equal to 5 ?

Answer: **print(“red”)**

```
if x > 4:
    print("red")
elif x < 7:
    print("blue")
```

Exercise 2

Q1 What will be the result if x is equal to 8 ? Answer: **print(“one”)**

Q2 What will be the result if x is equal to 1 ? Answer: **error**

```
if x > 7:
      print("one")
elif x > 2:
      print("two")
```

Exercise 3

Q1 What will be the result ? **False**

```
x  = 8
print ( x > 8 or (x > 5 and x < 7))
```

Exercise 4

Q1 What will be the result ? **True**

```
x  = 4
print ( (x < 3 or x > 1) and x < 9)
```

Exercise 5

Q1

What shall be the range of value to display '**red**' ? **11,-infinity[**

*Example : To display '**blue**', value must be in the range [11, +infinity[*

```
if value > 10:
  print("blue")
else:
  print("red")
```

Exercise 6

Q1 What will be the result ? **error**

```
a = 8
b = 12
if a == 12:
  print("beautiful")
  if b >= 12:
      print("cute")
```

Exercise 7

*Example : To display '**red**' X must be in the range]-infinity, 6]*

Q1

What must be the range of X to display '**green**' ?

To display 'green' X must be in range] –infinity,10

Q2

What must be the range of X to display '**blue**' ?

To display 'blue' X must be in range 23.

Q3

What must be the range of X to display '**pink**' ?

To display 'pink' X must be in range] +infinity,23.

```
if x<=6:
  print("red")

elif x<10:
  print("green")

elif x<=23:
  print("blue")

else:
  print("pink")
```

Exercise 8

Q1 What will be the result ? **Print (“B”)**

```
isGreater = 4 > 9
if isGreater :
    print("A")
else:
    print("B")
```

Exercise 9

Q1 What will be the result ? **Print (“True”)**

```
isGreater = 4 > 9
value = 50
print(isGreater or value > 20)
```