Q-1

Output of the following program will be :

```
n = 15

#Check If the number is between 1 to 10 if n>=1 and n<=10: print("too low")

#Check If the number is between 11 to 20 elif n>=10 and n<=20: print("medium")

#Check If the number is between 21 to 30 elif n>=20 and n<=30: print("large")

#Check if the number is greater than 30 else: print("too large"
```

medium

```
In [1]:

n = 15
#Check If the number is between 1 to 10
if n>=1 and n<=10:
    print("too low")

#Check If the number is between 11 to 20
elif n>=10 and n<=20:
    print("medium")

#Check If the number is between 21 to 30
elif n>=20 and n<=30:
    print("large")
#Check if the number is greater than 30
else:
    print("too large")</pre>
```

0-2

medium

Output of the following program will be:

```
n = 10

#Check If the number is between 1 to 10 if n>=1 and n<=10: print("too low")

#Check If the number is between 11 to 20 elif n>=10 and n<=20: print("medium")

#Check If the number is between 21 to 30 elif n>=20 and n<=30: print("large")
```

#Check if the number is greater than 30 else: print("too large")

```
In [2]:

n = 10
#Check If the number is between 1 to 10
if n>=1 and n<=10:
    print("too low")

#Check If the number is between 11 to 20
elif n>=10 and n<=20:
    print("medium")

#Check If the number is between 21 to 30
elif n>=20 and n<=30:
    print("large")
#Check if the number is greater than 30
else:
    print("too large")</pre>
```

Q-3

Output of the following program will be:

```
In [4]:

x = 15
if x <= 15:
    print("Inside if")
else:
    print("Inside else")

Inside if</pre>
```

Q-4 Mutiple Ifs

Which of the above 3 print statement(s) will be executed?

```
x = 5
if x < 6:
    print("Hello")
if x == 5:
    print("Hi")
else:</pre>
```

```
print("Hey")
print("hello")
print("hi")
In [7]:
x = 5
if x < 6:
   print("Hello")
if x == 5:
    print("Hi")
else:
    print("Hey")
Hello
Ηi
# Check number:
Given an integer n, find if n is positive, negative or 0.
If n is positive, print "Positive"
If n is negative, print "Negative"
And if n is equal to 0, print "Zero".
In [2]:
n = int(input())
if(n>0):
    print("Positive")
elif(n<0):</pre>
    print("Negative")
else:
    print("Zero")
7
Positive
```

Q-6

What will to following code segment print?

```
if (10 < 0) and (0 < -10):
        print("A")
elif (10 > 0) or False:
        print("B")
else:
        print("C")

Ans: B

In [4]:
if (10 < 0) and (0 < -10):
        print("A")
elif (10 > 0) or False:
        print("B")
else:
        print("C")
```

Q-7

What will to following code segment print?

```
if True or True:
    if False and True or False:
        print('A')
    elif False and False or True and True:
        print('B')
    else:
        print('C')
else:
        print('D')
Ans: B
```

```
In [5]:

if True or True:
    if False and True or False:
        print('A')
    elif False and False or True and True:
        print('B')
    else:
        print('C')
else:
        print('D')
B
```

Q-8:

```
Sum of n numbers : 1 to N
In [8]:
# method 1
num = int(input())
add,count = 0,1
while(count<=num):
    add = add + count
    count += 1
print(add)

10
55</pre>
```

```
In [12]:
# method 2
num = int(input())
add = 0
while(num>0):
    add = add + num
    num = num - 1

print(add)

20
210
```

Q - 9:

Sum of Even Numbers:

Given a number N, print sum of all even numbers from 1 to N.

```
In [15]:
# method 1
n = int(input())
even_sum = 0
while(n>0):
    if(n%2 == 0):
        even_sum = even_sum + n
        n = n -1
    else:
        n = n - 1

print(even_sum)
```

```
In [17]:
#method 2
num = int(input())
even_sum = 0
count = 1
while(count<=num):
    if(count%2 == 0):
        even_sum = even_sum + count
        count += 1
    else:
        count += 1

print(even_sum)</pre>
```

Q-10:

<h1>Fahrenheit to Celsius</h1>

Given three values - Start Fahrenheit Value (S), End Fahrenheit value (E) and Step Size (W), you need to convert all Fahrenheit values from Start to End at the gap of W, into their corresponding Celsius values and print the table.

```
In [5]:
#method 1
s = int(input())
e = int(input())
w = int(input())
# for i in range(s,e+1,w):
      c = int((i-32)*(5/9))
     print(i, " " , c)
      i=i+1
while(s<=e):</pre>
    c = int((s-32)*(5/9))
    print(s, " " , c)
    S = S + W
0
100
20
0
    -17
20
     -6
40
     4
     15
60
     26
80
100
      37
In [6]:
#method 2
s = int(input())
e = int(input())
w = int(input())
for i in range(s,e+1,w):
    c = int((i-32)*(5/9))
    print(i, " " , c)
    i=i+1
0
100
20
    -17
0
20
     -6
40
     4
     15
60
80
     26
100
      37
```

Q-11:

```
What will be the output of following code segment?
i=0
while i<10:
print(i)
i=i+1
Indentation Error.
In [7]:
i=0
while i<10:
print(i)
i=i+1
  File "<ipython-input-7-fb796788dbd4>", line 3
    print(i)
IndentationError: expected an indented block
case-2:
i=0
while i<10:
   print(i)
i = i+1
ans: Loop runs forever.
case - 3:
i=0
while i<10:
   print(i)
    i = i+1
ans: Numbers from 0 to 9.
In [ ]:
```