Lecture 7

If else statement (#output depends on the value of x)

x=eval(input('Enter number'))

if (x%2==0):

   print('x is even')

else:

   print('x is odd')

If.... elif... else statement (#output depends on the value of x)

x=eval(input('Enter number'))

if (x%2==0):

   print('x is divisible by 2')

elif (x%3==0):

   print('x is divisible by 3')

elif (x%4==0):

   print('x is divisible by 4')

else:

   print('x is not divisible by 2, 3 and 4')

while loop with break continue and pass (#2)

i,x,a=1,2, input('Enter expression')

while True if eval(a)>i else False:

   i=i+1

   if(i < 3):

     pass

   elif((i >= 3) and (i<=5)):

     continue

   else:

     break

   print(i)

for loop examples

Eg1

```
j=1
for i in range(1,5):
    print(j,end='')
#1111
```

Eg2

```
j=1
for i in range(1,5):
    print(j)
#1
#1
#1
#1
```

Eg3

```
j=1
for i in range(1,5):
    print(j, end=' ')
    j=j+1
#1 2 3 4
```

Eg4

```
n=eval(input("No of rows: "))
j=1
for i in range(1,n):
    for k in range(1,i+1):
        print(j,end=' ')
        j=j + 1
    print()
```

#Output

```
No of rows: 5

1

2 3

4 5 6

7 8 9 10
```

Eg5

n=eval(input("No of rows: "))

j=1

for i in range(1,n):

   k=1

   while (k < i+1):

     if (j%2==0):

       break

     else:

       print(j,end=' ')

     k=k+1

     j=j+1

   print()

#Output

```
No of rows: 4

1
```