Assignment 4- SYBScPythonPractical

December 9, 2021

Accept an integer from the user. If it is positive, print Positive else print Negative

```
[1]: x=input("Input an integer")
```

```
Input an integer5
```

```
[2]: x
```

```
[2]: '5'
```

```
[3]: type(x)
```

```
[3]: str
```

```
[4]: x=int(input("Input an integer"))
```

```
Input an integer7
```

```
[6]: x
```

```
[6]: 7
```

```
[7]: type(x)
```

```
[7]: int
```

```
[8]: if x>0:
         print("Positive")
     else:
         print("Negative")
```

```
Positive
```

```
[ ]:
```

2. Accept an integer from the user and check whether it is even or odd.

```
[9]: x=int(input("Input an integer"))
```

```
Input an integer11
```

```
[10]: if x%2==0:
          print("Even")
      else :
          print("Odd")
```

Odd

Accept an integer from the user. If it is positive, print its square root and log value else print it is negative.

```
[11]: x=int(input("Input an integer"))
```

Input an integer16

```
[12]: from math import sqrt, log
```

```
[13]: if x>0:
          r=sqrt(x)
          print(r)
          print(log(x))
      else :
          print("Negative")
```

4.0
2.772588722239781

1 while loop

Initialization while condition: statements increments

Print "Python" 10 times using while loop.

```
[14]: print('Python'*10)
```

PythonPythonPythonPythonPythonPythonPythonPythonPythonPython

```
[18]: i=1
      while i<= 5 :
          print("Python")
          i=i+1   #check whether i++ works
```

Python
Python
Python
Python
Python

Print the integers 1 to 20 in increasing (decreasing) order.

```
[22]: i=1
      while i<= 20 :
```

```
    print(i)
    i=i+1
```

```
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
```

[23]:
```
i=20
while i>=1 :
    print(i)
    i=i-1
```

```
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
```

1

Accept a positive integer x from the user and calculate factorial of x.

```
[27]: x=int(input("Input a positive integer"))
```

```
Input a positive integer4
```

```
[28]: f=1
      while x>1:
          f=f*x
          x=x-1
      print(f)
```

```
24
```

for i in sequence (list / tuple / set) : Statements

```
[29]: colors=['v','i','g','b','o','u','r']
```

```
[31]: for i in colors:
          print(i)
```

```
v
i
g
b
o
u
r
```

```
[32]: names=['anay','vijay','sujay']
```

```
[33]: for i in names:
          print(i)
```

```
anay
vijay
sujay
```

Repeat question 1 for the list x = [2, 3.7, "success"].

```
[34]: x=[2,3.7,'success']
```

```
[35]: for i in x:
          print(i)
```

```
2
3.7
success
```

Print the numbers from 1 to 10.

```
[43]:  for i in range(11):
           print(i)
```

```
0
1
2
3
4
5
6
7
8
9
10
```

Print the numbers from 31 to 50.

```
[46]:  for i in range(31,51,1):
           print(i)
```

```
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
```

Accept a positive integer x from the user and print table of x.

```
[36]:  x= int(input("Input a positive integer"))
```

```
Input a positive integer5
```

```
[38]:  i=1
       while i<11:
           print(x*i)
```

```
    i=i+1
```

```
5
10
15
20
25
30
35
40
45
50
```

[40]:
```
for i in range(1,11,1):
    print(x*i)
```

```
5
10
15
20
25
30
35
40
45
50
```

Print the numbers from 100 to 200 which are divisible by 5.

[41]:
```
for i in range(100,201,1):
    if i%5 ==0:
        print(i)
```

```
100
105
110
115
120
125
130
135
140
145
150
155
160
165
170
175
```

```
180
185
190
195
200
```

Print the numbers less than 20 which are not divisible by 4.

```
[43]: for i in range(20):
          if i%4!=0 :
              print(i)
```

```
1
2
3
5
6
7
9
10
11
13
14
15
17
18
19
```

Print the integers between 100 and 200 which are divisible by both 3 and 7.

```
[44]: for i in range(100,201,1):
          if i%3==0 and i%7==0:
              print(i)
```

```
105
126
147
168
189
```

[ ]: