10/15/2019 Lab 01

```
In [19]:
              # 01
              def EvenList(n):
                  lst=[]
          4
                  for i in range(n):
           5
                      a=int(input("Input number: "))
           6
                      lst.append(a)
                  print("Input list is: ",lst)
           7
                  print("List of Even Numbers")
           8
           9
                  lst1=[]
          10
                  for j in lst:
          11
                      if j%2 == 0:
          12
                          lst1.append(j)
          13
                      else:
          14
                          pass
                  print(lst1)
          15
              c=int(input("Enter no. of inputs: "))
          16
          17
              EvenList(c)
            Enter no. of inputs: 5
            Input number: 1
            Input number: 2
            Input number: 3
            Input number: 4
            Input number: 5
            Input list is: [1, 2, 3, 4, 5]
            List of Even Numbers
            [2, 4]
In [22]:
          1 # 02
              def Maxx(lst):
                  print("Max no. of list is: ",max(lst))
           4 Maxx([1,2,5,4,3])
            Max no. of list is: 5
In [71]:
           1 # 03
             def Maxx(lst):
                  print("Min no. of list is: ",min(lst))
           3
           4 Maxx([1,2,5,4,3])
            Min no. of list is: 1
In [29]:
          1 # 04
           2 def Last(lst):
                  print("Last no. of list is",lst[len(lst)-1])
           4 Last([1,2,5,4,3])
            Last no. of list is 3
In [32]:
          1 # 05
              def Kelement(lst):
                  k=int(input("Value of K: "))
           3
           4
                  print(lst[k-1])
              Kelement([1,2,5,4,3])
            Value of K: 3
            5
          1 # 06
In [33]:
           2 def SecondLast(1st):
                  print("Last no. of second list is",lst[len(lst)-2])
           3
              SecondLast([1,2,5,4,3])
```

Last no. of list is 4

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In [42]:
               # 07
           1
               def Reverse(lst):
           3
                   a=lst
           4
                   a.reverse()
            5
                   print(a)
               Reverse([1,2,5,4,3])
             [3, 4, 5, 2, 1]
               # 08
In [56]:
               def Unique(lst):
            2
            3
                   lst1=[]
                   for i in 1st:
            4
            5
                        if i not in lst1:
            6
                            lst1.append(i)
            7
                   print(lst1)
            8 Unique([1,2,2,3])
             [1, 2, 3]
In [72]:
           1 # 09
               def UserNumbers():
            3
                   1=[]
            4
                   for i in range(10):
            5
                       a=eval(input("Enter numbers: "))
                        1.append(a)
            6
            7
                   lst=[]
           8
                   for i in 1:
           9
                       if i%2 == 0:
           10
                            lst.append(i)
           11
                   print(lst)
                   print("Max no. of list is: ",max(lst))
print("Min no. of list is: ",min(lst))
print("Last no. of list is",lst[len(lst)-1])
           12
           13
           14
           15
                   print("Last no. of second list is",lst[len(lst)-2])
           16 UserNumbers()
             Enter numbers: 1
             Enter numbers: 2
             Enter numbers: 3
             Enter numbers: 4
             Enter numbers: 5
             Enter numbers: 6
             Enter numbers: 7
             Enter numbers: 8
             Enter numbers: 9
             Enter numbers: 10
             [2, 4, 6, 8, 10]
             Max no. of list is: 10
             Min no. of list is: 2
             Last no. of list is 10
             Last no. of second list is 8
In [87]:
           1 # 10
            2
               def ShowExcitement(a):
                   print("A quick brown fox jumps over the lazy dog\n")
            3
            4
                   if a==4:
            5
                       return
            6
                   else:
            7
                       ShowExcitement(a+1)
              ShowExcitement(0)
             A quick brown fox jumps over the lazy dog
             A quick brown fox jumps over the lazy dog
             A quick brown fox jumps over the lazy dog
             A quick brown fox jumps over the lazy dog
             A quick brown fox jumps over the lazy dog
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Lab 01
  In [77]:
                # 11
                def Greater(a,b,c):
             3
                    if a>b:
             4
                         if a>c:
             5
                             print(a)
             6
                         else:
             7
                             print(c)
             8
                     elif b>a:
             9
                         if b>c:
            10
                             print(b)
            11
                         else:
                             print(c)
            12
            13 Greater(8,4,6)
              8
   In [3]:
             1
                # 12
                def divide(dividend, divisor):
                     print("Quotint",dividend//divisor)
print("Remainder",dividend%divisor)
             4
             5
                divide(2,3)
              Quotint 0
              Remainder 2
  In [83]:
             1
                # 13
                class Person:
             3
                     def __init__(self,name,age):
             4
                         self.name=name
             5
                         self.age=age
                     def Birthday(self):
                         self.age+=1
             8
                         print("Incremented age is: ",self.age)
                a=Person("Talha",2).Birthday()
              Incremented age is: 3
▶ In [163]:
              1 # Bonus Task
              2 import math
              3 from math import *
              4 reservoir_volume=4.445e8
              5 reservoir_volume+=((5/100)*reservoir_volume)
              6 print("Increase 5% is: ",(reservoir_volume))
                 rainfall=5e5
              8 reservoir_volume+=rainfall
              9 print("Add Rainfall: ",(reservoir_volume))
             10 reservoir_volume-=((5/100)*reservoir_volume)
             print("Decrease 5% is: ",(reservoir_volume))
              Increase 5% is: 466725000.0
              Add Rainfall:
                                467225000.0
```

localhost:8888/notebooks/Lab 01.ipynb

Decrease 5% is: 443863750.0