Assignment - 10

1A, 2A, 3A, 4A.

```
list1 = [9,2,3,4,5]
print("the list: ",list1)
sum=0
prd=1
small=list1[0]
large=list1[0]
even=[]
odd=[]
for i in list1:
   sum=sum+i
print("add: ",sum)  # add
for i in list1:
   prd=prd*i
print("prd: ",prd)  # multiply
for i in list1:
   if (i<small):
      small=i
print("smallest: ",small)
for i in list1:
   if (i>large):
      large=i
```

5A.

```
list1 = [10, 20, 4, 45, 99]


mx=max(list1[0],list1[1])
secondmax=min(list1[0],list1[1])
n =len(list1)
for i in range(2,n):
    if list1[i]>mx:
        secondmax=mx
        mx=list1[i]
    elif list1[i]>secondmax and \
        mx != list1[i]:
        secondmax=list1[i]


print("Second highest number is : ",\
     str(secondmax))
```

6A.

```
def Nmaxelements(list1, N):
    final_list = []

    for i in range(0, N):
        max1 = 0

        for j in range(len(list1)):
```

```
        if list1[j] > max1:
            max1 = list1[j];

    list1.remove(max1);
    final_list.append(max1)

  print(final_list)

# Driver code
list1 = [2, 6, 41, 85, 0, 3, 7, 6, 10]
N = 2

# Calling the function
Nmaxelements(list1, N)
```

7A.

```
print(list1)
print('Even nos:')
for i in range(len(list1)):
  if (list1[i]%2==0):
    print(list1[i])
```

8A.

```
print(list1)
print('Odd nos:')
for i in range(len(list1)):
```

```
    if (list1[i]%2!=0):
        print(list1[i])
```

9A.

```
test_list=[1,2,[],4]
res = [ele for ele in test_list if ele != []]
print(res)
```

10A.

```
list1_orig=[1,2,3]
list1_copy = list1_orig[:]
list1_copy
```

11A.

```
def countX(lst, x):
    count = 0
    for ele in lst:
        if (ele == x):
            count = count + 1
    return count


# Driver Code
lst = [8, 6, 8, 10, 8, 20, 10, 8, 8]
x = 8
print(countX(lst,x)," is no of occurences of 8")
```