ds-day-3-1

July 25, 2024

[ ]:
```
#sum of elements of array
```

[3]:
```
import array as arr
a=arr.array('i',[1,2,3])
sum=0
for i in range(len(a)):
    sum=sum+a[i]
print(sum)
```

```
6
```

[ ]:
```
#reverse of array
```

[5]:
```
import array as arr
a=arr.array('i',[1,2,3])
for i in range(len(a)-1,-1,-1):
    print(a[i])
```

```
3
2
1
```

[6]:
```
#find minimum out of 10 element
```

[ ]:
```
import array as arr
a=arr.array('i',[1,2,3])
min=a[0]
for i in range(len(a)):
    if(a[i])
```

1 Sorting (bubble sort)

[ ]:
```

```

[22]:
```
l=[78,55,28,66,11,25]
for i in range(len(l)):
    for j in range(len(l)-1):
```

```
        if (l[j]>l[j+1]):
            l[j],l[j+1]=l[j+1],l[j]

for i in range(len(l)):
    print(l[i])
```

```
11
25
28
55
66
78
```

[ ]:
```
##effective bubble␣
↪sort#########################################################################
```

[45]:
```
l=[78,55,28,66,11,25]
for i in range(len(l)):
    for j in range(len(l)-1):
        if (l[j]>l[j+1]):
            l[j],l[j+1]=l[j+1],l[j]
for i in range(len(l)):
    print(l[i])
```

```
11
25
28
55
66
78
```

2 selective sort

[ ]:
```

```

[42]:
```
a=[9,5,8,4,3]
for i in range(len(a)):
    min_index=i
    for j in range(i+1,len(a)):
        if(a[min_index]>a[j]):
            min_index=j

    a[i],a[min_index]=a[min_index],a[i]
for i in range(len(a)):
    print(a[i])
```

```
3
```

```
4
5
8
9
```

[1]:
```
######################
```

[3]:
```
#Print maximum number  from an array
a=[]
n=int(input("enter the size of array"))
for i in range(n):
    ele=int(input("Enter the numbers"))
    a.append(ele)
print("Entered array will be",a)
maximum=a[0]
for i in range(len(a)):
    if(a[i]>maximum):
          maximum=a[i]
print("maximum number from the entered number will be",maximum)
```

```
enter the no5
Enter the numbers3
Enter the numbers6
Enter the numbers2
Enter the numbers1
Enter the numbers2
Entered array will be [3, 6, 2, 1, 2]
maximum number from the entered number will be 6
```

[4]:
```
#Print minimum number from array
a=[]
n=int(input("enter the size of array"))
for i in range(n):
    ele=int(input("Enter the numbers"))
    a.append(ele)
print("Entered array will be",a)
minimum=a[0]
for i in range(len(a)):
    if(a[i]<minimum):
          minimum=a[i]
print("minimum number from the entered numbers is ",minimum)
```

```
enter the no2
Enter the numbers1
Enter the numbers2
Entered array will be [1, 2]
minimum number from the entered numbers is  1
```

[5]:
```
#Serach of an element
a=[]
n=int(input("enter the size of array"))
for i in range(n):
    ele=int(input("Enter the numbers"))
    a.append(ele)
print("Entered array will be",a)
x=int(input("Enter the number to find in array"))
count=0
for i in range(len(a)):
    if(a[i]==x):
        print("element is at index",count)
    count=count+1
```

```
enter the no3
Enter the numbers1
Enter the numbers2
Enter the numbers3
Entered array will be [1, 2, 3]
Enter the number to find in array2
element is at index 1
```

[10]:
```
#Program to choose what to do in array
a=[]
n=int(input("enter the size of array"))
for i in range(n):
    ele=int(input("Enter the numbers"))
    a.append(ele)

print("1.print entered element \n 2.add array element \n 3.remove element \n 4.
 ↪exit")
ch=int(input("Enter the choice"))
if(ch==1):
    print("Entered array will be",a)
if(ch==2):
    n=int(input("how many numbers to add"))
    for i in range(n):
        ele=int(input("Enter the numbers"))
        a.append(ele)
    print("Array with added elements will be",a)
if(ch==3):
    ele=int(input("Enter the element to remove from array"))
    a.remove(ele)
    print("Array with removed elements will be",a)
if(ch==4):
    exit
```

```
enter the size of array3
Enter the numbers4
Enter the numbers5
Enter the numbers6
1.print entered element
 2.add array element
 3.remove element
 4.exit
Enter the choice1
Entered array will be [4, 5, 6]
```

[ ]: