ds-day-2-1-array

July 25, 2024

1 sum of two numbers using function

```
[4]: def sum(a,b):
         c=a+b
         print('sum is',c)
```

```
[6]: a=int(input("enter a="))
     b=int(input("enter b="))
     sum(a,b)
```

```
enter a=5
enter b=6
sum is 11
```

2 Factorial using for loop

```
[11]: n=int(input("enter n="))
      fact=1
      for i in range(1,n+1):
          fact=fact*i
      print(fact)
```

```
enter n=6
720
```

3 Array

```
[14]: import array as arr
      a=arr.array('i',[11,56,698,68,2,564,3,5])
      for i in range(0,8):
          print(a[i])
```

```
11
56
698
68
```

```
2
564
3
5
```

[23]:
```
#### using len
```

[25]:
```
import array as arr
a=arr.array('i',[1,2,3])
for i in range(len(a)):
    print(a[i])
b=arr.array('d',[2.5,3.2,3.5])
for i in range(len(b)):
    print(b[i])
```

```
1
2
3
2.5
3.5
3.2
```

3.0.1 insert

[30]:
```
import array as arr
a=arr.array('i',[1,2,3])

a.insert(1,4)#######################

for i in range(len(a)):
    print(a[i])
b=arr.array('d',[2.5,3.2,3.5])
for i in range(len(b)):
    print(b[i])
```

```
1
4
2
3
2.5
3.2
3.5
```

[69]:
```
##append(to add onley one element at the end)
```

[34]:
```
import array as arr
a=arr.array('i',[1,2,3])
for i in range(len(a)):
```

```
      print(a[i])
b=arr.array('d',[2.5,3.2,3.5])

b.append(4.4)###################

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

```
1
2
3
2.5
3.2
3.5
4.4
```

[ ]: `## print only any one element`

[35]:
```
import array as arr
a=arr.array('i',[1,2,3])
for i in range(len(a)):
      print(a[i])
b=arr.array('d',[2.5,3.2,3.5])
print(b[0])#######################
```

```
1
2
3
2.5
```

[39]: `## using remove(in remove write value)`

[44]:
```
import array as arr
a=arr.array('i',[1,2,3])
for i in range(len(a)):
      print(a[i])
b=arr.array('d',[2.5,3.2,3.5])

b.remove(2.5)###################

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

```
1
2
3
3.2
3.5
```

```
[37]:  ##using pop (in pop write index number)
```

```
[46]:  import array as arr
       a=arr.array('i',[1,2,3])
       for i in range(len(a)):
           print(a[i])
       b=arr.array('d',[2.5,3.2,3.5])

       b.pop(2)####################

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

```
1
2
3
2.5
3.2
```

```
[47]:  import array as arr
       a=arr.array('i',[1,2,3])
       for i in range(len(a)):
           print(a[i])
       b=arr.array('d',[2.5,3.2,3.5])

       b.pop(2)####################
```

```
1
2
3
```

```
[47]:  3.5
```

```
[49]:  ##serching an element in array(first occurance of any number)(using index)
```

```
[53]:  import array as arr
       a=arr.array('i',[1,2,3])

       b=a.index(3)######
       print(b)
```

```
2
```

```
[56]:  ##updating array
```

```
[58]:  import array as arr
       a=arr.array('i',[1,2,3])
```

```python
a[2]=20#####################
for i in range(len(a)):
    print(a[i])
```

```
1
2
20
```

[60]:
```python
##count (to count any element in array how many times)
```

[62]:
```python
import array as arr
a=arr.array('i',[1,2,3])

b=a.count(2)
print("count of 2 is",b)

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

```
count of 2 is 1
1
2
3
```

[ ]:
```python
##Reverse
```

[65]:
```python
import array as arr
a=arr.array('i',[1,2,3])

a.reverse()#########

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

```
3
2
1
```

[66]:
```python
#extend(to add more than one value at last)
```

[68]:
```python
import array as arr
a=arr.array('i',[1,2,3])

a.extend((1,2))###########

for i in range(len(a)):
```

```
    print(a[i])
```

```
1
2
3
1
2
```

```
[ ]: ##
```