==

1. Sort a list

```
l=[1,2,74,34,23,78,66]
l.sort()
print(l)
```

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2. Sum 1 to n using a While loop

```
n=10
i=1
s=0
while i<=n:
    s=s+i
    i+=1
print("sum ",s)
```

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3. Concatenate 2 tuples. Find the index of a given element. Count occuurence of a given element.

```
a=(1,2,3)
b=(4,2,6)
c=a+b
print(c)
element=4
print("index of given element is ",c.index(element))
for i in c:
    print(f"count of {i} is {c.count(i)} ")
```

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4. Count special characters in a given string.

```
s="ajsd #$6 ^ dakf@#"
cc,dc,sp,spc=0,0,0,0
for i in range(len(s)):
    if s[i].isalpha():
        cc+=1
    elif s[i].isdigit():
```

```python
            dc+=1
        elif s[i].isspace():
            sp+=1
        else:
            spc+=1
print("char count ",cc)
print("digit count ",dc)
print("space count ",sp)
print("special char count ",spc)
```

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5. Convert given string to uppercase. Also to lowercase.

```python
s="Hello World"
print("upper case :",s.upper())
print("lower case :",s.lower())
```

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6. Aged-based ticket price: 0-3: free; 4-12: Rs 10; >12: Rs 20

```python
a=int(input("enter age "))

if a>0 and a<=3:
    print("ticket is free of cost ")
elif a>3 and a<=10:
    print("ticket cost is 10 rupees")
else:
    print("ticket cost 20 rupees")
```

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7. Frequency of characters in a given string

```python
s="helloworld"
d={}
for c in s:
    if c not in d:
        d[c]=1
    else:
        d[c]+=1
print(d)
```

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8. Mean, Median and Mode of a list of numbers

```python
l=[1,2,3,6,45,1,5,9,21,67,10]
from statistics import mean,median,mode

print("mean is ",mean(l))
print("median is ",median(l))
print("mode is ",mode(l))
```

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9. Binary to Decimal and Octal

```python
a="10010"
decimal=int(a,2)
octal=oct(int(a,2))

print("decimal num ",decimal)
print("octal num ",octal)
```

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