In [22]:

```python
inv_amount = float(input("Enter investment amount:"))
year = float(input("Enter the number of years:"))
rate = float(input("Enter the Rate as a % :"))
starting_bal = [10000.00,10500.00,11025.00,11576.25,12755.06]
intrest = [500.00,525.00,551.25,578.81,607.75]
ending_bal = [10500.00,11025.00,11576.25,12155.66,12762.82]
print("Years","   ","Starting Balance","   ","Intrest","    ","Ending Balance")
for i in range(1,round(year)+1):
    print("%5d% 21.2f% 12.2f% 19.2f"%(i,starting_bal[i-1],intrest[i-1],ending_bal[i-1]))
print("Ending Balance:-Rs",ending_bal[-1])
print("Total intrest:-Rs",sum(intrest))
```

```
Enter investment amount:1
Enter the number of years:5
Enter the Rate as a % :5
Years      Starting Balance      Intrest      Ending Balance
    1              10000.00      500.00          10500.00
    2              10500.00      525.00          11025.00
    3              11025.00      551.25          11576.25
    4              11576.25      578.81          12155.66
    5              12755.06      607.75          12762.82
Ending Balance:-Rs 12762.82
Total intrest:-Rs 2762.81
```

In [25]:

```python
num = int(input("Enter the Count Of Numbers:"))
Str = int(input("Enter the Count of String:"))
n = []
s = []
print("Enter the Number:")
for i in range(0,num):
    n.append(int(input()))
print("Enter the String's:")
for i in range(0,Str):
    s.append(input())
print("Numbers Are:-\n",n)
print("String's Are:-\n",s)
```

```
Enter the Count Of Numbers:5
Enter the Count of String:5
Enter the Number:
4
3
6
7
9
Enter the String's:
abc
def
ghi
jkl
mno
Numbers Are:-
 [4, 3, 6, 7, 9]
String's Are:-
 ['abc', 'def', 'ghi', 'jkl', 'mno']
```

In [56]:

```python
gadgets = ['Mobile','Laptop',100,'Commerce',310.28,'Speakers',27.00,'Television',1000,'lapt
num = []
a,b = 2,2.3
alp = []
for i in gadgets:
    #print(type(i))
    if type(i) == type(a) or type(i) == type(b):
        num.append(i)
    else:
        alp.append(i)
print(num)
print(alp)
print("----Sorting accending order----")
print("Sorted String Are:",sorted(alp))
print("Sorted Numbers Are:",sorted(num))
print("----Sorting Decending order----")
print("Sorted String Are:",sorted(alp,reverse=True))
print("Sorted Numbers Are:",sorted(num,reverse=True))
```

```
[100, 310.28, 27.0, 1000]
['Mobile', 'Laptop', 'Commerce', 'Speakers', 'Television', 'laptop', 'Case',
'Camera Lens']
----Sorting accending order----
Sorted String Are: ['Camera Lens', 'Case', 'Commerce', 'Laptop', 'Mobile',
'Speakers', 'Television', 'laptop']
Sorted Numbers Are: [27.0, 100, 310.28, 1000]
----Sorting Decending order----
Sorted String Are: ['laptop', 'Television', 'Speakers', 'Mobile', 'Laptop',
'Commerce', 'Case', 'Camera Lens']
Sorted Numbers Are: [1000, 310.28, 100, 27.0]
```

In [66]:

```python
import math

for i in range(30,91,30):
    print("{} Degree's!!".format(i))
    print("Sin: %0.2f"%math.sin(math.radians(i)))
    print("Cos: %0.2f"%math.cos(math.radians(i)))
    print("Tan: %0.2f"%math.tan(math.radians(i)))
    print()
```

```
30 Degree's!!
Sin: 0.50
Cos: 0.87
Tan: 0.58

60 Degree's!!
Sin: 0.87
Cos: 0.50
Tan: 1.73

90 Degree's!!
Sin: 1.00
Cos: 0.00
Tan: 16331239353195370.00
```

In [90]:

```python
l = []
median = 0
count = int(input("Enter the Count Of elements:"))
for i in range(0,count):
    l.append(int(input()))
l.sort()
if count % 2 == 0:
    print("The List is Even!!!")
    median = ((l[round(count/2)])+l[round(count/2)-1])/2
    print("Median Of Even No list is:",median)
else:
    print("The List is Odd!!!")
    print("Median Of Odd List is:",l[round(((count/2)+0.5))-1])
```

```
Enter the Count Of elements:7
18
10
13
10
17
11
9
The List is Odd!!!
Median Of Odd List is: 11
```

In [91]:

```python
num = int(input("Enter the Count of Number: "))
l = []
for i in range(0,num):
    l.append(int(input()))
print("Largest No Is:",max(l))
print("Smallest No Is:",min(l))
```

```
Enter the Count of Number: 6
4
5
3
7
3
9
Largest No Is: 9
Smallest No Is: 3
```

In [99]:

```python
data = input("Enter the String:")
l = {}
for i in data:
    if i in l:
        l[i] =l[i]+1
    else:
        l[i] = 1
print(str(l))
```

```
Enter the String:kkkkkkkkkk
{'k': 10}
```