In [1]:
```
print("Enter the number")
a=int(input())
if a%2 == 0:
    print(a,"is Even")
else:
    print(a,"is Odd")
```

```
Enter the number
3
3 is Odd
```

In [2]:
```
a=float(input("Enter the temperature in Centigrade : "))
f=(a*1.8)+32
print("The temperature in Fahrenheit is",f)
```

```
Enter the temperature in Centigrade : -9.8
The temperature in Fahrenheit is 14.36
```

In [3]:
```
a = int(input("Enter how many numbers to be multiplied :"))
b=1 #we cant declare in loop
for i in range (a):
    x=float(input("Enter the number to be multiplied :"))#it can be a float since
    b=b*x
print("The product of set of real number is ",b)
```

```
Enter how many numbers to be multiplied :3
Enter the number to be multiplied :2
Enter the number to be multiplied :4
Enter the number to be multiplied :6
The product of set of real number is  48.0
```

In [4]:
```
def factorial(n):
    if n == 1:
        return n
    else:
        return n*factorial(n-1)#factorail (n-1) will be in loop until the value r
a = int(input("Enter the number : "))#we can't use float
if a<0:
    print("We can't find factorial for negative integer")
elif a==0:
    print("The factorial of 0 is 1")
else:
    b=factorial(a)
    print("The factorail of",a,"is",b)
```

```
Enter the number : 4
The factorail of 4 is 24
```

In [5]:
```
a=['a','e','i','o','u','p']
b=input("Element to be found in list: ")
c=len(a)
if b not in (a):
    print("Element not present in list")
else:
    for i in range (0,c):
        if b==a[i]:
            print("The element",b,"is at index position",i)
```

```
Element to be found in list: p
The element p is at index position 5
```

In [6]:
```
a=[98,100,45,76,32,87,12,7]
a.sort()
print("List ofter sorting",a)
b=int(input("Enter the element to be searched : "))
i=0#index starting position
j=(len(a)-1)#index ending position
while(i<=j):
    x=(i+j)//2
    if b==a[x]:
        print("Element found at index position",x)
        break
    elif(b<a[x]):
        j=x-1
    else:
        i=x+1
else:
    print("Element not found in the list")
```

```
List ofter sorting [7, 12, 32, 45, 76, 87, 98, 100]
Enter the element to be searched : 5
Element not found in the list
```

In [7]:
```
list = []
a = int(input("How many elements do you want in list"))

print("Enter the numbers in list")#if all number are negative we need to use min

for i in range(a):
    x = int(input())
    list.append(x)

b = 0#If all numbers are positive we can declare b=0.
for x in list:
    if x > b:
        b = x

print("The largest number in list is", b)
```

```
How many elements do you want in list4
Enter the numbers in list
3
5
1
0
The largest number in list is 5
```

In [8]:
```
list = []
a = int(input("Enter how many elements need to be in list "))
for i in range (a):
    x=input()
    list.append(x)
print(list)
b = int(input("Enter the index number in a list to be removed "))
if b<=(a-1):
    print("The element present in index",b,"is",list.pop(b))
    print("The new list is",list)
else:
    print("index range doesnot exits")
```

```
Enter how many elements need to be in list 3
q
e
r
['q', 'e', 'r']
Enter the index number in a list to be removed 2
The element present in index 2 is r
The new list is ['q', 'e']
```

In [9]:
```
a={
    "Name":"Pradeep",
    "age":24,
    "mail id":"pradeep@gmail.com",
    "address":"chennai"
    }
dict.items(a)
```

Out[9]:
```
dict_items([('Name', 'Pradeep'), ('age', 24), ('mail id', 'pradeep@gmail.com'),
('address', 'chennai')])
```

In [10]:
```
list = []
a = int(input("Enter how many elements need to be in list "))
for i in range (a):
    x=int(input("Enter element in list: "))
    list.append(x)
i=0
j=0
while i<a:
    j=j+list[i]
    i+=1
print("The average of numbers is",j/a)
```

```
Enter how many elements need to be in list 3
Enter element in list: 1
Enter element in list: 2
Enter element in list: 3
The average of numbers is 2.0
```

In [ ]:
```

```