

**Q1-> Program which takes input as age and tells whether you are eligible to vote or not?**

In [8]:

```
a=int(input("Enter your age : "))
if(a<18):
    print("You are not Eligible to vote !!!")
else:
    print("You are Eligible to vote .")
```

Enter your age : 15  
You are not Eligible to vote !!!

**Q2-> Program to find larger number entered by User ?**

In [10]:

```
a = int(input("Enter first no. :"))
b = int(input("Enter second no. :"))
if(a<b):
    print(b,"is greater.")
else:
    print(a,"is greater.")
```

Enter first no. :5  
Enter second no. :7  
7 is greater.

**Q3 -> Program to print first 10 prime numbers whose module with 5 is 2.**

In [28]:

```
lst=[]
for i in range (2,200):
    flag =0
    for j in range(2,int(i/2)+1):
        if(i%j==0):
            flag=1
            break
    if(flag==0):
        if(i%5==2):
            lst.append(i)
print("lst:",lst[0:len(lst)])
print("The prime no. that give rem. 2 with 5 are :",lst [0:10])
```

lst: [2, 7, 17, 27, 37, 47, 57, 67, 77, 87, 97, 107, 117, 127, 137, 147, 157, 167, 177, 187, 197]  
The prime no. that give rem. 2 with 5 are : [2, 7, 17, 27, 37, 47, 57, 67, 77, 87]

**Q4 -> Program to find the average of two numbers entered by a user?**

In [31]:

```
a=int(input("Enter first no. :"))
b=int(input("enter second no. :"))
print("Average of",a,"&",b,"is:",(a+b)/2)
```

Enter first no. :5  
enter second no. :7  
Average of 5 & 7 is: 6.0

**Q5 -> Program to calculate Squared of a number entered by User?**

In [32]:

```
a=int(input("Enter a no. :"))
print(" The Square of ",a,"is :",a**2)
```

Enter a no. :5  
The Square of 5 is : 25

**Q6 -> Program to display User entered name using input( followed by "Good Afternoon"?)**

In [34]:

```
a=input("Enter your Name :")
print(a,"Good Afternoon")
```

Enter your Name :Lokansh  
Lokansh Good Afternoon

**Q7-> Program to detect double Spaces in a User entered string if yes then replace it with single space?**

In [37]:

```
# a=input("Enter your string : ")
# for i in range(len(a)):
#     if(a[i]==" " & a[i+1]==" "):
#         a.replace(" ", " ")
# print(a)
a = input("Enter your String :")
b=a.replace(" ", " ")
print(b)
```

Enter your String :hello! I'm Devil  
hello! I'm Devil

**Q8-> Program to format below code using escape sequence Characters.**  
 Dear Sir Python is very amazing language. Please share more Questions like this  
 Thank you."

In [48]:

```
print("\ Dear Sir Python is very amazing Programming language.Please share more Questions like this. Thank you\"")
```

" Dear Sir Python is very amazing Programming language.Please share more Questions like this. Thank you"

**Q9->Program to store 7 names of your friends enter by User.**

In [1]:

```
lst=[]
for i in range(7):
    lst.append(input("Enter your name :"))
lst
```

Enter your name :ram  
Enter your name :luffy  
Enter your name :zoro  
Enter your name :saitama  
Enter your name :naruto  
Enter your name :lupin  
Enter your name :Nami

Out[1]:

```
['ram', 'luffy', 'zoro', 'saitama', 'naruto', 'lupin', 'Nami']
```

**Q10 -> Program to accept Marks of 10 students entered by user and display them in sorted Way.**

In [2]:

```
marks=[]
for i in range(10):
    marks.append(int(input("Enter your marks :")))
print(sorted(marks))
```

Enter your marks :65  
Enter your marks :43  
Enter your marks :99  
Enter your marks :76  
Enter your marks :49  
Enter your marks :37  
Enter your marks :80  
Enter your marks :66  
Enter your marks :72  
Enter your marks :59  
[37, 43, 49, 59, 65, 66, 72, 76, 80, 99]

**Q11 -> Program to save heights of 10 students in tuple and then change the height of 3rd student.**

In [3]:

```
# tup=()
# for i in range(3):
#     tup+=(input("Enter height :"))
# tup

# tuple(marks)
# tup = ('Python', 'Java')
# tup = tup + ('C++',)
# print(tup)

# ('Python', 'Java', 'C++')
height=[]
for i in range(10):
    height.append(int(input("Enter your height :")))
print(tuple(height))
height[2]=193
print(tuple(height))
```

```
Enter your height :72
Enter your height :69
Enter your height :77
Enter your height :93
Enter your height :56
Enter your height :65
Enter your height :82
Enter your height :81
Enter your height :73
Enter your height :75
(72, 69, 77, 93, 56, 65, 82, 81, 73, 75)
(72, 69, 193, 93, 56, 65, 82, 81, 73, 75)
```

**Q12 -> Program to calculate sum of elements of list having value less than 10.**

In [5]:

```
sum=0
list=[1,4,2,20,15,18,2,6,16,12,3,5,18]
for i in list:
    if(i<10):
        sum+=i
print("Sum of elements smaller than 10 is",sum)
```

```
Sum of elements smaller than 10 is 23
```

**Q13 -> Program to calculate teen ager students in list. list=[11,9,14,18,15,16,20,13,16,17,13,18,0]**

In [7]:

```
count=0
list=[0,7,11,14,18,4,19,3,8,15]
for i in list:
    if i in range(13,20):
        count+=1
print("No. of teens are",count)
```

```
No. of teens are 4
```

**Q14 -> Program to create a dictionary with keys=name in English and value = Meaning of name.**

In [1]:

```
dict={}
x=int(input("Enter length of dictionary :"))
for i in range(x):
    name=input("Enter your name :")
    meaning=input("Enter meaning of your name :")
    dict[name]=meaning
dict
```

```
Enter length of dictionary :2
Enter your name :Raj
Enter meaning of your name :King
Enter your name :Kiran
Enter meaning of your name :Ray
```

Out[1]:

```
{'Raj': 'King', 'Kiran': 'Ray'}
```

**Q15 -> Program to take 10 numbers input and display only distinct elements."**

In [2]:

```
lst=[]
for i in range(10):
    lst.append(int(input("Enter a no.:")))
print(set(lst)) #typecasting into set sorts AND removes duplicates.
```

```
Enter a no.:6
Enter a no.:4
Enter a no.:8
Enter a no.:1
Enter a no.:3
Enter a no.:9
Enter a no.:5
Enter a no.:2
Enter a no.:7
Enter a no.:3
{1, 2, 3, 4, 5, 6, 7, 8, 9}
```

**Q16 -> Create an empty dict and then allow your friends to enter names of favorite heroes as key and Movies as Value.**

In [1]:

```
dict={}
x=int(input("Enter length of dictionary :"))
for i in range(x):
    actor=input("Enter actor's name :")
    movie=input("Enter movie's name :")
    dict[actor]=movie
dict
```

```
Enter length of dictionary :2
Enter actor's name :Salman khan
Enter movie's name :Kick
Enter actor's name :Robert Downey Jr.
Enter movie's name :Iron man
```

Out[1]:

```
{'Salman khan': 'Kick', 'Robert Downey Jr.': 'Iron man'}
```

**a)Try to repeat your favorite Hero followed by same movie. Try to repeat hero followed by different movie.**

In [3]:

```
dict['Salman khan']='Jai ho'
dict
```

Out[3]:

```
{'Salman khan': 'Jai ho', 'Robert Downey Jr.': 'Iron man'}
```

**b)Try to add different hero with the same movie.**

In [5]:

```
dict['Randeep hooda']='Kick'
dict
```

Out[5]:

```
{'Salman khan': 'Jai ho',
 'Robert Downey Jr.': 'Iron man',
 'Randeep hooda': 'Kick'}
```

**c)How to print all heroes' names.**

In [6]:

```
dict.keys()
```

Out[6]:

```
dict_keys(['Salman khan', 'Robert Downey Jr.', 'Randeep hooda'])
```

**d)How to print all movie names.**

In [7]:

```
dict.values()
```

Out[7]:

```
dict_values(['Jai ho', 'Iron man', 'Kick'])
```

**Q17 -> Create a set and then add int,float, string,tuple,list as element in that set. Then try to change the second element in the list.**

In [24]:

```
# set={5,4.5,"Anyeong",("Hi","Hello"),["Bonjour","HoLa"]}
lst=["Bonjour","HoLa"]
# lst1 = set(lst)
info={5,4.5,"Anyeong",("Hi","Hello")}
info.update(lst)
# set[1]=3
info
```

Out[24]:

```
{('Hi', 'Hello'), 4.5, 5, 'Anyeong', 'Bonjour', 'HoLa'}
```

**Q18 -> Program to find out whether a student is overall pass or fail. His marks in 5 subjects entered by the user. To pass in each subject he must score 33%. To overall pass he must pass in all subjects and total marks in all subjects greater than 40%. Maximum marks in each subject is 100.**

In [25]:

```
marks=[]
sum=0
for i in range(5):
    x=int(input())
    sum+=x
    marks.append(x)
if (all(i>33 for i in marks)):
    if(sum>40):
        print("Fully pass")
    else:
        print("Fail")
else:
    print("Fail")
```

```
65
35
76
55
43
Fully pass
```

**Q19 -> A mail is defined as spam if it contains any from the below keywords. Write a program to check if text entered by a user is spam or not. spam\_words= ["make a lot of money", "buy now", "subscribe this", "Click this", "you Won", "Discount", "Coupon"]**

In [26]:

```
spam_words=["make a lot of money", "buy now", "subscribe this", "Click this", "you Won", "Discount", "Coupon"]
text=input("Enter the text :")
for i in spam_words:
    if(text.find(i)):
        print("Spam mail")
    else:
        print("Correct mail")
```

```
Enter the text :Get a big Discount on electronics and item.
Spam mail
```

**Q20 -> Program to check whether an entered username is 10 characters long or not.**

In [27]:

```
name=input("Enter the username :")
def check(name):
    count=0
    for i in name:
        count+=1
    if(count==10):
        print("Valid username.")
    else:
        print("Invalid length.")
check(name)
```

```
Enter the username :Lokansh
Invalid length.
```

**\*\* Q21 -> Program to check whether a entered K\_ID is valid or Not. Valid means exist in Our Database.\*\***

In [30]:

```
db=["K20776","K20790","K20793","K20799"]
id=input("Enter your KID :")
def check(id):
    if id in db:
        print("Valid KID.")
    else:
        print("Invalid KID.")
check(id)
```

Enter your KID :K20776  
Valid KID.

**Q22 -> Program to find whether a user entered a Review is positive or Negative. ve means text contains from ["good", "amazing", "value for money"] -ve means text containing words from ["cheap", "poor","fraud"].**

In [9]:

```
pos=["good","great","fantastic"]
neg=["waste","bad","cheap"]
text=input("Enter your Review :")
for i in pos:
    if i in text:
        print("+ve review")
        break
for i in neg:
    if i in text:
        print("-ve review")
        break
```

Enter your Review :It was fantastic  
+ve review

**Q23 -> Create two programs to print a table of user entered number using while and for loop.**

In [6]:

```
num=int(input("Enter a no. :"))
def table(num):
    print("Using while loop :")
    count = 1
    while(count!=11):
        print(num*count)
        count+=1
    print("\nUsing for loop :")
    for i in range(1,11):
        print(num*i)
table(num)
```

Enter a no.:5  
Using while loop :  
5  
10  
15  
20  
25  
30  
35  
40  
45  
50

Using for loop :  
5  
10  
15  
20  
25  
30  
35  
40  
45  
50

**Q24 -> Create a Dictionary with name and marks and greet only those names having marks greater than 70. Greet Message=" Congrats name you scored more than 70 ".**

In [8]:

```
record={"kal":50,"jake":90,"chong":78,"Phills":55,"Rock":93,"daniel":85}
for i in record:
    if (record[i]>70):
        print("Congrats",i,",you scored more than 70.")
```

Congrats jake ,you scored more than 70.  
Congrats chong ,you scored more than 70.  
Congrats Rock ,you scored more than 70.  
Congrats daniel ,you scored more than 70.

**Q25 -> Program to calculate sum of first N natural numbers.**

In [10]:

```
a=int(input("Enter a no.:"))
sum=0
for i in range(a+1):
    sum+=i
print("The sum of first",a,"natural nos. is",sum)
```

Enter a no.:3  
The sum of first 3 natural nos. is 6

**Q26 -> Program to print table of a number in reversed order.**

In [11]:

```
num=int(input("Enter a no.:"))
def table(num):
    for i in range(10,0,-1):
        print(num*i)
table(num)
```

Enter a no.:6  
60  
54  
48  
42  
36  
30  
24  
18  
12  
6