

Q.WAP to accept age,gender and number of days and display the wages according to the given table

.....Age.....Gender.....Wages/day

:>=18 and <30.....M.....700

.....F.....750

:>=30 and <=40.....M.....800

.....F.....850

```
In [2]: age=int(input("Enter your age:"))
Gender=input("Enter your gender:")
days=int(input("Enter number of days:"))
wages_earned=0
if(Gender=="M"):
    if(age>=18 and age<30):
        wages_earned=days*700
    elif(age>=30 and age<=40):
        wages_earned=days*800
    else:
        print("Enter valid age")
elif(Gender=="F"):
    if(age>=18 and age<30):
        wages_earned=days*750
    elif(age>=30 and age<=40):
        wages_earned=days*850
    else:
        print("Enter valid age")
else:
    print("Enter valid gender")
print("Age:",age,"Gender:",Gender,"Days worked:",days,"Wages earned:",wages_earned)
```

```
Enter your age:25
Enter your gender:F
Enter number of days:20
Age: 25 Gender: F Days worked: 20 Wages earned: 15000
```

WAP to accept three sides of triangle and check wether its equilateral,isosceles or scalen triangle

equilateral:all sides equal scalene:three enequl sides isosceles:two sides aare equal

```
In [8]: side1=int(input("Enter side-1:"))
side2=int(input("Enter side-2:"))
side3=int(input("Enter side-3:"))
if(side1==side2==side3):
    print("It is an equilateral triangle")
elif((side1==side2)or(side2==side3)or(side3==side1)):
    print("It is a Isosceles triangle")
else:
    print("It is scalene triangle")
```

```
Enter side-1:10
Enter side-2:20
Enter side-3:10
It is a Isosceles triangle
```

Q.Find sum of n natural numbers

```
In [11]: num=int(input("Enter number"))
sum=int(num*(num+1)/2)
print("Sum:",sum)
```

Enter number10
Sum: 55

Q.Ask for the numbers from user and find average

```
In [3]: limit=int(input("Enter how many numbers you want to sum"))
sum=0
for i in range(limit):
    num=int(input(f"Enter a number{i+1}:"))
    sum+=num
print("Sum:",sum)
avg=sum/limit
print("Average:",avg)
```

Enter how many numbers you want to sum5
Enter a number1:1
Enter a number2:2
Enter a number3:3
Enter a number4:4
Enter a number5:5
Sum: 15
Average: 3.0

Q.Find the sum of digits in a number

```
In [7]: num=int(input("Enter a number:"))
sum=0
temp=num
while temp!=0:
    sum+=temp%10
    temp//=10
print("Sum:",sum)
```

Enter a number:23679
Sum: 27

Q.WAP to reverse the number

```
In [13]: n=int(input("Enter a number:"))
rev_num=0
while n!=0:
    digit=n%10
    rev_num=rev_num*10+digit
    n=n//10
print("Reverse number:",rev_num)
```

Enter a number:123
Reverse number: 321

Q.Check the palindrome number

```
In [14]: n=int(input("Enter a number:"))
temp=n
rev_num=0
while n!=0:
    digit=n%10
    rev_num=rev_num*10+digit
    n=n//10
```

```
if(temp==rev_num):  
    print("It is palindrome")  
else:  
    print("It is not palindrome")
```

Enter a number:121
It is palindrome

Q.check for the armstrong number

```
In [5]: import math as m  
n=int(input("Enter a number:"))  
temp=n  
sum=0  
c=len(str(n))  
while n!=0:  
    digit=n%10  
    sum+=m.pow(digit,c)  
    n=n//10  
if(sum==temp):  
    print("Armstrong")  
else:  
    print("Not armstrong")
```

Enter a number:153
Armstrong

Q.Check for the prime number

```
In [4]: num=int(input("Enter a number"))  
c=0  
for i in range (2,num):  
    if(num%i==0):  
        c+=1  
print(c)  
if (c>0):  
    print("Not a prime number.")  
else:  
    print("Prime number")
```

Enter a number2
0
Prime number

Q.Print prime numbers between 1 to 100

```
In [27]: count=0  
for i in range (2,101):  
    c=0  
    for j in range(2,i):  
        if(i%j==0):  
            c+=1  
            break  
    if(c==0):  
        count+=1  
        print(i)  
print("Count:",count)
```

2
3
5
7
11

13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
97
Count: 25

Q.Happy number

```
In [ ]: number=int(input("Enter a number:"))  
        sum=0  
        flag=True  
        while flag:  
            print(num)  
            sum=0  
            digits
```

Enter a number:13

In []: