LOTUS VALLEY INTERNATIONAL SCHOOL

Computer Science Practical File

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Q1. WAP to calculate the mean of five numbers.

CODE:

```
a=int(input("Enter the first number:"))
b=int(input("Enter the second number:"))
c=int(input("Enter the third number:"))
d=int(input("Enter the fourth number:"))
e=int(input("Enter the fifth number:"))
print("The mean number is" , (a+b+c+d+e/5))
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter the first number:3
Enter the second number:5
Enter the third number:6
Enter the fourth number:4
Enter the fifth number:1
The mean number is 18.2
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q2. WAP to enter your name and age.

CODE:

```
a=input("Write your name:")
b=input("Write your age:")
print ("Your name is " , a, "and your age is" , b)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Write your name:Ekaksh
Write your age:Fifteen
Your name is  Ekaksh and your age is Fifteen
PS C:\Users\shiva\Desktop\Test1>
```

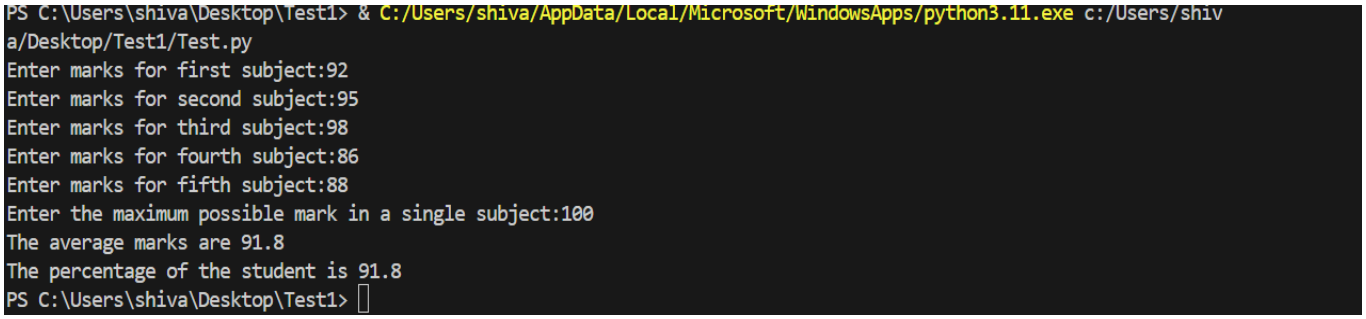
OUTPUT:

Q3. WAP to calculate and display percentage of a student from a given marks of the student.

CODE:

```
a=int(input("Enter marks for first subject:"))
b=int(input("Enter marks for second subject:"))
c=int(input("Enter marks for third subject:"))
d=int(input("Enter marks for fourth subject:"))
e=int(input("Enter marks for fifth subject:"))
```

```
f=int(input("Enter the maximum possible mark in a single subject:"))
print("The average marks are", (a+b+c+d+e)/5)
print("The percentage of the student is",(a+b+c+d+e)*20/f)
```



OUTPUT:

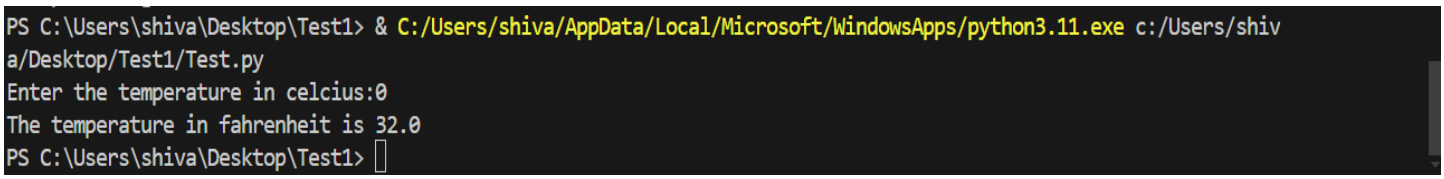
Q4. WAP to convert temperature in Celsius scale to Fahrenheit scale.

CODE:

```
a=int(input("Enter the temperature in celcius:"))
f= a*1.8 +32
```

print("The temperature in fahrenheit is" , f)

OUTPUT:



Q5. WAP to calculate the area of a square and write a program to calculate the perimeter of a rectangle.

CODE:

a=int(input("Enter the side of the square:")) print("The area of the square is" , a*a) b=int(input("Enter the lenght of the rectangle:")) c=int(input("Enter the breadth of the rectangle:")) print("The perimeter of the rectangle is" , b*c)

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter the side of the square:4
The area of the square is 16
Enter the lenght of the rectangle:2
Enter the breadth of the rectangle:3
The perimeter of the rectangle is 6
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q6. WAP to calculate the area of a triangle.

CODE:

```
a=int(input("What is the height of the triangle:"))
b=int(input("What is the breadth of the triangle:"))
print("The area of the triangle is" , a*b/2)
```

OUTPUT:

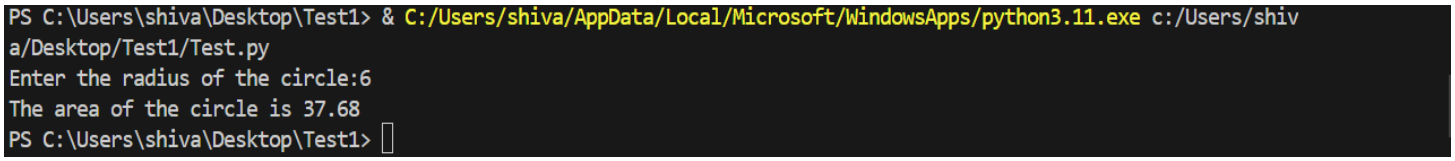
```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
What is the height of the triangle:3
What is the breadth of the triangle:2
The area of the triangle is 3.0
PS C:\Users\shiva\Desktop\Test1>
```

Q7. WAP to calculate the area of a circle.

CODE:

```
a=int(input("Enter the radius of the circle:"))
print("The area of the circle is" , 2*3.14*a)
```

OUTPUT:



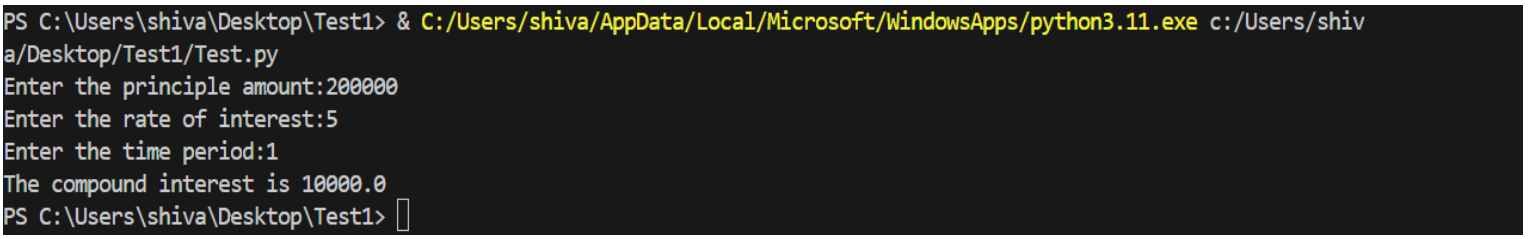
Q8. WAP to calculate the compound interest of a given amount.

CODE:

```
a=eval(input("Enter the principle amount:"))
```

```
b=eval(input("Enter the rate of interest:")) c=eval(input("Enter the time period:")) d=a*(1+b/100)*c -a
print("The compound interest is" , d)
```

OUTPUT:



Q9. WAP to display name with “ seperators.

CODE:

```
a=input("Enter your first name:")
b=input("Enter your surname:")
print("Your name is", a,b, sep="""")
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter your first name:Ekaksh
Enter your surname:Goyal'
Your name is''Ekaksh''Goyal'
PS C:\Users\shiva\Desktop\Test1>
```

Q10. WAP to calculate the year in which you will turn 100 years old.

CODE:

```
a=int(input("Please enter your birth year:")) print("The year in which you will turn 100 years old is" , a+100)
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Please enter your birth year:2008
The year in which you will turn 100 years old is 2108
PS C:\Users\shiva\Desktop\Test1>
```

Q11. WAP to calculate the time given in hours into minutes.

CODE:

```
a=eval(input("Please enter the time
in hours"))
b=a*60
print("The time in minutes is" , b)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Please enter the time in hours2.5
The time in minutes is 150.0
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q 12. WAP to calculate volume given in liters into milliliters.

CODE:

```
a=eval(input("Enter the volume in
liters"))
print("The volume in milliliters is" ,
a*100
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter the volume in liters10
The volume in milliliters is 10000
PS C:\Users\shiva\Desktop\Test1>
```

Q13. WAP to calculate the distance given in kilometers into meters.

CODE:

```
a=float(input("Enter the distance in kilometers:"))
b=a*1000
print("The distance in meters is" , b)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter the distance in kilometers:500
The distance in meters is 500000.0
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q14. WAP to calculate time given in minutes to hours.

CODE:

```
a=float(input("Enter the time in minutes:")) print("The time in hours is:" , a/60)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter the time in minutes:120
The time in hours is: 2.0
PS C:\Users\shiva\Desktop\Test1> S
```

OUTPUT:

Q15. WAP to calculate the distance given in meters into kilometers.

CODE:

```
a=eval(input("Enter distance in meters:"))
b=a/1000
print("The distance in meters is:" , b)
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter distance in meters:2000
The distance in meters is: 2.0
PS C:\Users\shiva\Desktop\Test1>
```

Q16. WAP to calculate money given in rupees into paise.

CODE:

```
a=float(input("Enter the amount in rupees:"))
b= a*100
print("The amount in paise is" , b)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
Enter the amount in rupees:2
The amount in paise is 200.0
PS C:\Users\shiva\Desktop\Test1>
```

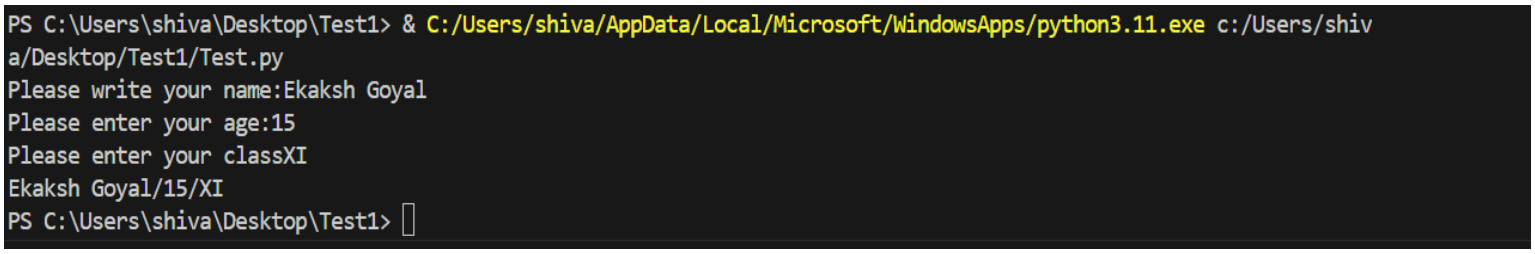
OUTPUT:

Q17. WAP to print your name , age and class separated by “/”.

CODE:

```
a=input("Please write your name:")
b=int(input("Please enter your
age:"))
c=input("Please enter your class")
print( a , b , c , sep="/")
```

OUTPUT:



Q18 . WAP to print the quotient and reminder of a given dividend and divisor.

CODE:

```
a=eval(input("What is the
dividend?")) b=eval(input("What is
the divisor?"))
```

```
c=int(a//b)
print(c)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiv
a/Desktop/Test1/Test.py
What is the dividend?5
What is the divisor?5
1
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

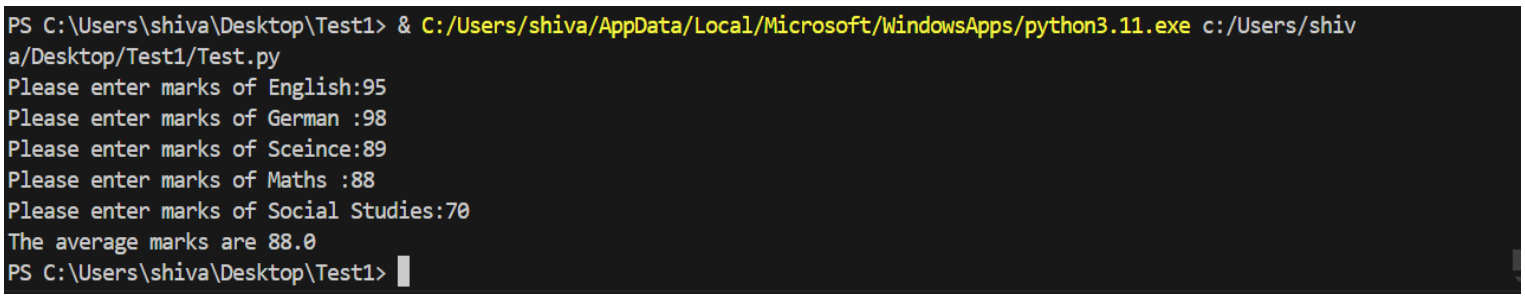
Q19. WAP that accepts marks of 5 subjects and outputs the average marks.

CODE:

```
a=eval(input("Please enter marks of English:"))
b=eval(input("Please enter marks of German :"))
c=eval(input("Please enter marks of Sceince:"))
```

```
d=eval(input("Please enter marks of Maths :"))
e=eval(input("Please enter marks of Social Studies:"))
print("The average marks are" , (a+b+c+d+e)/5)
```

OUTPUT:



Q20. WAP to input a number and print its first five multiples.

CODE:

```
a=eval(input("What is the number? :"))
```

```
print("The first 5 multiples of " , a, "are:" , a ,a*2 ,a*3 ,a*4 ,a*5)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/Test1/Test.py
What is the number? :5
The first 5 multiples of  5 are: 5 10 15 20 25
PS C:\Users\shiva\Desktop\Test1>
```

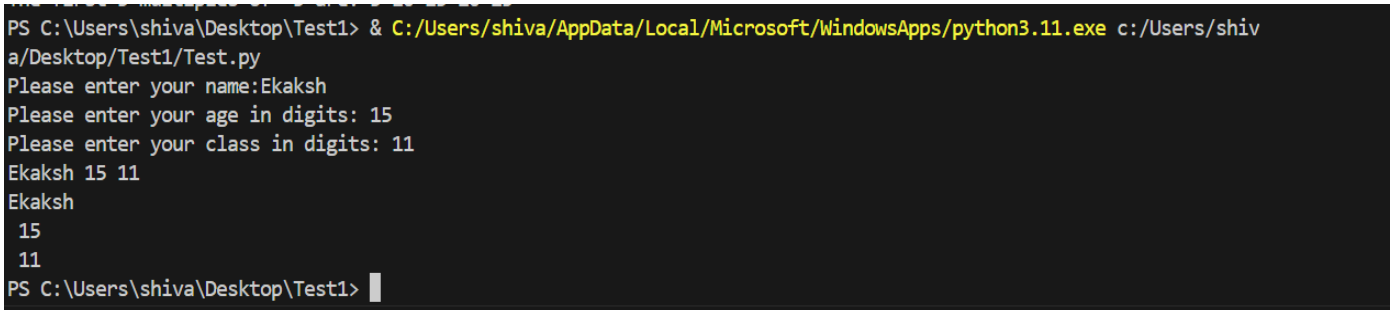
OUTPUT:

Q21. WAP to read details like name, class, age of a student and then print the details firstly in the same line and then in the next line.

CODE:

```
a=input("Please enter your name:")
b=int(input("Please enter your age in digits: "))
        c= int(input("Please enter your class in digits: "))
        print(a,b,c)
        print(a,"\n", b , "\n", c)
```

OUTPUT:



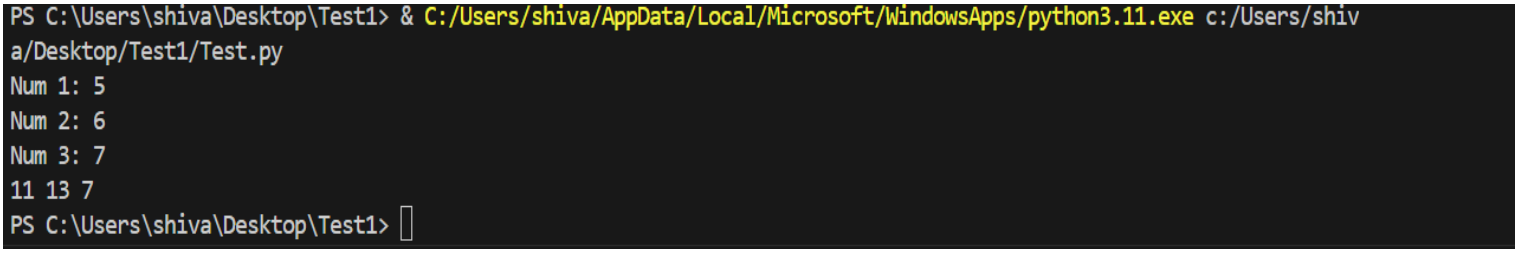
Q22. WAP to read three number in three variables and swap first two variables with the sums of the first and second, third and second numbers respectively.

CODE:

```
a=int(input("Num 1: "))
b=int(input("Num 2: "))
c=int(input("Num 3: "))
a=a+b
b=b+c
```

print(a,b,c)

OUTPUT:



Q23. WAP to display the sign of the Chinese Zodiac for the given year in which you were born.

CODE:

```
year=int(input("Input your birth year"))
if (year-2000)%12==0:
    sign='Dragon'
```

```
elif (year-2000)%12==1:
    sign='Snake'
elif (year-2000)%12==2:
    sign='Horse'
elif (year-2000)%12==3:
    sign='Sheep'
elif (year-2000)%12==4:
    sign='Monkey'
elif (year-2000)%12==5:
    sign='Rooster'
elif (year-2000)%12==6:
    sign='Dog'
elif (year-2000)%12==7:
    sign='Pig'
elif (year-2000)%12==8:
    sign='Rat'
elif (year-2000)%12==9:
    sign='Ox'
elif (year-2000)%12==10:
    sign='Tiger'
```

```
else:
    sign='Hare'
print("Your Chinese Zodiac sign is",
sign)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/
Input your birth year2008
Your Chinese Zodiac sign is Rat
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q24. WAP to check whether a number is composite or not.

CODE:

```
a=int(input("Enter a number: "))
for i in range(2,a):
    if a%i==0:
        print("Number is Composite.")
```

```
        break
else:
    print("Number is not Composite")
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/T
Enter a number: 2
Number is not Composite
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q25. WAP to check if a number is odd or even

CODE:

```
a=eval(input("Enter the number"))
if a%2==0:
    print("Number is Even")
else:
    print("Number is Odd")
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/Test1/Codes.py
Enter the number3
Number is Odd
PS C:\Users\shiva\Desktop\Test1>
```

Q26. WAP to print the sum of square of numbers 1 to 10.

CODE:

```
a=0
for i in range(1,11):
      a=a +i**2
print(a)
```

Q27. WAP to check if a person is eligible to vote.

CODE:

```
a=int(input("Please Enter your Age: "))
if a>=18:
   print("You are eligible to vote.")
else:
   print("You are not eligible to vote.")
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva
Please Enter your Age: 16
You are not eligible to vote.
PS C:\Users\shiva\Desktop\Test1>
```

Q28. WAP to replace all occurrences of a with $.

CODE:

```
s=input("Enter the String: ")
print(s.replace("a","$"))
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/Tes
Enter the String: Ekaksh
Ek$ksh
PS C:\Users\shiva\Desktop\Test1>
```

Q29. WAP to detect if two strings are Anagrams.

CODE:

```
s=input("Enter First String: ")
```

```
t=input("Enter Second String: ")
if len(s)==len(t):
    for i in range(len(s)):
        if s[i] not in t:
            print("Strings are not
Anagrams.")
            break
        elif t[i] not in s:
            print("Strings are not
Anagrams.")
            break
    else:
        print("Strings are Anagrams.")
else:
    print("Strings are not Anagrams.")
```

OUTPUT:

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/Test1/Codes.
Enter First String: dog
Enter Second String: god
Strings are Anagrams.
PS C:\Users\shiva\Desktop\Test1>
```

Q30. WAP to count the vowels in a string.

CODE:

```
s=input("Enter the String: ")
print(s.replace("","-"))
```

Q31. WAP to count the number of words and characters in a string.

CODE:

```
s=input("Enter the String: ")
print("The number of words: ",
len(s.split()))
letters=0
for i in s:
    if i.isalpha():
        letters+=1
print("Number of Letters", letters)
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/Test1/Codes.py
Enter the String: Ekaksh
The number of words:  1
Number of Letters 6
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q32. WAP to check wheather a string is a palindrome or not.

CODE:

```
s=input("Enter the String: ")
for i in range(len(s)):
    if s[i]!=s[-i-1]:
        print("The string is not a Palindrome.")
        break
else:
    print("The string is a Palindrome.")
```

```
PS C:\Users\shiva\Desktop\Test1> & C:/Users/shiva/AppData/Local/Microsoft/WindowsApps/python3.11.exe c:/Users/shiva/Desktop/Te
Enter the String: Ekaksh
The string is not a Palindrome.
PS C:\Users\shiva\Desktop\Test1>
```

OUTPUT:

Q33. WAP to check whether a string is a panagram or not.

CODE:

```
s=input("Enter the String: ")
a="abcdefghijklmnopqrstuvwxyz"
for i in range(len(a)):
    if a[i] not in s:
        continue
    else:
        print("The String is not a Panagram")
        break
else:
    print("The String is a Panagram")
```

OUTPUT:

Q34. Given a string s, return a string where all occurences of its first char have been changed to '', except do not change the first char itself. e.g. 'babble' yields 'ba*le' . Assume that the string is length 1 or more.Hint: s.replace(stra, strb) returns a version of string s where all instances of stra have been replaced by strb.

CODE:

```
string = input("Enter the string")
first = string[0]
x = first + string[1:].replace(first, "*")
print(x)
```

OUTPUT:

```
Enter the stringbobby
bo**y
```

35. Given strings a and b, return a single string with a and b separated by a space '<a> <b>', except swap the first 2 chars of each string. e.g. 'mix', pod' -> 'pox mid' , 'dog', 'dinner' -> 'dig donner'. Assume a and b are length 2 or more.

CODE:

```
string_1 = input("Enter the first
string: ")
string_2 = input("Enter the second
string: ")
string_f1 = string_2[:2] +
string_1[2:]
string_f2 = string_1[:2] +
string_2[2:]
string_f = string_f1 + " " + string_f2
print(string_f)
```

OUTPUT:

```
Enter the first string: Dog
Enter the second string: Dinner
Dig Donner
```

36. Given a string, find the first appearance of the substring 'not' and 'bad'. If the 'bad' follows the 'not', replace the whole 'not'...'bad' substring with 'good'. Return the resulting string. So 'This dinner is not that bad!' yields: This dinner is good!

CODE:

```
string_main = input("Enter the sentence: ")
not_index = string_main.find("not")
bad_index = string_main.find("bad")
print(not_index, bad_index)

string_final = string_main[:not_index] + "good"  + string_main[bad_index + 3:]
print(string_final)
```

OUTPUT:

```
Enter the sentence: The dinner is not that bad
14 23
The dinner is good
```

37. Consider dividing a string into two halves. If the length is even, the front and back halves are the same length. If the length is odd, we'll say that the extra char goes in the front half. e.g. 'abcde', the front half is 'abc', the back half 'de'. Given 2 strings, a and b, return a string of the form - a-front + b-front + a-back + b-back.

CODE:

```
str_main1 = input("Enter the string: ")

if len(str_main1) % 2 == 0:
    str_front1 = str_main1[:(len(str_main1))//2]
```

```
    str_back1 =
str_main1[(len(str_main1))//2:]

else:
    str_front1 =
str_main1[:(len(str_main1) + 1)//2]
    str_back1 =
str_main1[(len(str_main1) + 1)//2:]

str_main2 = input("Enter the string:
")

if len(str_main2) % 2 == 0:
    str_front2 =
str_main2[:(len(str_main2))//2]
    str_back2 =
str_main2[(len(str_main2))//2:]

else:
```

```
    str_front2 =
str_main2[:(len(str_main2) + 1)//2]
    str_back2 =
str_main2[(len(str_main2) + 1)//2:]

print(str_front1, str_front2,
str_back1, str_back2)
```

OUTPUT:

```
Enter the string: python
Enter the string: code
pyt co hon de
```

38. Given a list of strings, return the count of the number of strings where the string length is 2 or more and the first and last chars of the string are the same.

CODE:

```
num = int(input("No of strings ? "))
list_main = []
for i in range(0, num):
```

```
    x = input("Enter the string")
    list_main = list_main + [x]
x = 0
for j in list_main:
    if j[0] == j[-1] and len(j)>=2:
        x+=1
print(x)
```

OUTPUT:

```
No of strings ? 8
Enter the stringHello
Enter the stringbob
Enter the stringanna
Enter the stringmadam
Enter the stringnow
Enter the stringwow
Enter the stringthis
Enter the stringcode
4
```

39. Python Program to Replace all Occurrences of ‘a’ with $ in a String

CODE:

```
str1 = input("Enter a string : ")
print(str1.replace("a","$"))
```

OUTPUT

```
Enter a string : amazing
$m$zing
```

40. Python Program to Remove the nth Index Character from a Non-Empty String

CODE:

```
str1 = input("Enter a string : ")
n = int(input("Enter a nth character to be removed : "))
str2 = str1[0:n] + str1[n+1:]
print(str2)
```

OUTPUT:

```
Enter a string : Hello
Enter a nth character to be removed : 3
Helo
```

41. Python Program to Detect if Two Strings are Anagrams

CODE:

```
str1 = input("Enter a string : ")
str2 = input("Enter a string : ")
for i in str1 :
    if i in str2 :
        print("Anagram")
```

```
        break
    else :
        print("Not an anagram")
```

OUTPUT:

```
Enter a string : worth
Enter a string : throw
It is an anagram

============================
Enter a string : hello
Enter a string : world
It is not an anagram
```

42. Python Program to Form a New String where the First Character and the Last Character have been Exchanged

CODE:

```
str1 = input("Enter a string :")
a = str1[0]
b = str1 [-1]
str2 = b + str1[1:-1] + a
print(str2)
```

OUTPUT:

```
Enter a string :hello
oellh
```

43. Python Program to Count the Number of Vowels in a String

CODE:

```
x = input("Enter the string: ")
a = "aeiouAEIOU"
count = 0
for i in x:
    if i in a:
        count+=1
print(count)
```

OUTPUT:

```
Enter the string: Hello my name is
5
```

44. Python Program to Take in a String and Replace Every Blank Space with Hyphen

CODE:

```
x = input("Enter a string: ")
x = x.replace(" ", "-")
print(x)
```

OUTPUT:

```
Enter a string: How are you
How-are-you
```

45.Python Program to Calculate the Length of a String Without Using a Library Function

CODE:

```
x = input("Enter the string: ")
count = 0
for i in x:
    count+=1
print(count)
```

OUTPUT:

```
Enter the string: python
6
```

46. Python Program to Remove the Characters of Odd Index Values in a String

CODE:

```
x = input("Enter the string: ")
result = ""
```

```
for i in range(len(x)):
    if i % 2 == 0:
        result += x[i]

print("String after removing odd
index characters:", result)
```

OUTPUT:

```
Enter the string: Hello how are you
String after removing odd index characters: Hlohwaeyu
```

47.Python Program to Calculate the Number of Words and the Number of Characters Present in a String

CODE:

```
x = input("Enter the string")
list_main = x.split()
num_c = ""
for i  in x:
    if i.isalnum():
        num_c += i
```

```
print(f"The no of words are {len(list_main)} and the number of characters are {len(num_c)}")
```

OUTPUT:

```
Enter the stringThe number of words in this string are given below
The no of words are 10 and the number of characters are 41
```

48.Python Program to Take in Two Strings and Display the Larger String without Using Built-in Functions

CODE:

```
x = input("Enter the string")
y = input("Enter the string")
count_1 = 0
for i in x:
    count_1 +=1
count_2 = 0
for j in y:
    count_2 +=1

if count_1>count_2:
```

```
    print(f"The larger string is {x}")
else:
    print(f"The larger string is {y}")
```

OUTPUT:

```
Enter the stringpython
Enter the stringcode
The larger string is python
```

49. Python Program to Count Number of Lowercase Characters in a String

CODE:

```
x = input("Enter the string")
count = 0
for i in x:
    if i.islower():
        count +=1
print(f"The no of lowercase letters are {count}")
```

OUTPUT:

```
Enter the stringAaEeIiOoUu
The no of lowercase letters are {5}
```

50. Python Program to Check if a String is a Palindrome or Not

CODE:

```
str1 = input("Enter a string")

for i in range(0, len(str1)):
        if str1[i] != str1[len(str1)-(i+1)]:
            x = 0
            break
        else:
            x = 1
if x == 1:
    print("It is a palindrome")
else:
    print("Not a palindrome")
```

OUTPUT:

```
Enter a stringmadam
It is a palindrome
```

51.Python Program to Calculate the Number of Upper Case Letters and Lower Case Letters in a String

CODE:

```
x = input("Enter the string")
x_main = ""
count_upper = 0
count_lower = 0
for i in x:
    if i.isalpha():
        x_main +=i
for j in x_main:
    if j.islower():
        count_lower +=1
    else:
        count_upper +=1
print(f"The number of lower case letters are {count_lower} and the number of upper case are {count_upper}")
```

OUTPUT:

```
Enter the stringAaEeIiOoUu
The number of lower case letters are 5 and the number of upper case are 5
```

52.Python Program to Check if a String is a Pangram or Not

CODE:

```
str1 = input("Enter a string : ")
str1_main = ""
x = 0
for i in str1:
    if i.isalpha():
        str1_main += i

str1_main = str1_main.lower()
for j in
"qwertyuiopasdfghjklzxcvbnm":
    if j not in str1_main:
        x = 1
        break
if x == 0:
    print("It is a pangram")
else:
    print("It is not a pangram")
```

OUTPUT:

```
Enter a string : abcdefghijklmnopqrstuvwxyz
It is a pangram

========== RESTART: C
Enter a string : hello
It is not a pangram
```

53.Python Program to Accept a Hyphen Separated Sequence of Words as Input and Print the Words in a Hyphen-Separated Sequence after Sorting them Alphabetically

CODE:

```
input_sequence = input("Enter a hyphen-separated sequence of words: ")
words = input_sequence.split('-')
words.sort()
sorted_sequence = '-'.join(words)
print("Sorted sequence:", sorted_sequence)
```

OUTPUT:

```
Enter a hyphen-separated sequence of words: Hello-my-name-is
Sorted sequence: Hello-is-my-name
```

54.Python Program to Calculate the Number of Digits and Letters in a String

CODE:

```
x = input("Enter the string")
count_digit = 0
count_letters = 0

for i in x:
    if i.isdigit():
        count_digit += 1
    elif i.isalpha():
        count_letters +=1
print(f"The number of digits are {count_digit} and the number of letters are {count_letters}")
```

OUTPUT:

```
Enter the stringI will turn 16 this year
The number of digits are 2 and the number of letters are 17
```

55.Python Program to Form a New String Made of the First 2 and Last 2 characters From a Given String

CODE:

```
x = input("Enter the string: ")
x_main = x[:2] + x[-2:]
print(f"The new string is {x_main}")
```

OUTPUT:

```
Enter the string: hello
The new string is helo
```

56.Python Program to Count the Occurrences of Each Word in a Given String Sentence

CODE:

```
s=input("What is the sentence:")
sx = s.split()
for s1 in sx:
    s2=s.replace(s1,'')
    x=len(s)
    y=len(s1)
    z=len(s2)
```

```
    a=(x-z)/y
    print("The number of times the word",s1,"occurs in the string are",a)
```

OUTPUT:

```
The number of times the word The occurs in the string are 1.0
The number of times the word beautiful occurs in the string are 2.0
The number of times the word is occurs in the string are 2.0
The number of times the word beautiful occurs in the string are 2.0
The number of times the word is occurs in the string are 2.0
The number of times the word the occurs in the string are 1.0
```

57.Python Program to Check if a Substring is Present in a Given String

CODE:

```
x = input("Enter the string : ")
y = input("Enter the string : ")
if y in x:
    print("Present")
else:
    print("Not Present")
```

OUTPUT:

```
Enter the string : Raman
Enter the string : man
Present
```

58. WAP to take two dictionaries from the user and add one dictionary to the other

CODE:

```
d1={}
d2={}
n1=int(input("How many keys do you want to enter in the first dictionary?: "))
for i in range (n1):
    a=input("Enter key: ")
    b=input("Enter value: ")
    d1[a]=b
print("The first dictionary is:",d1)
n2=int(input("How many keys do you want to enter in the second dictionary? :"))
```

```
for j in range (n2):
    c=input("Enter key: ")
    d=input("Enter value: ")
    d2[c]=d
print("The second dictionary is:",d2)
d1.update(d2)
print("The updated dictionary
is:",d1)
```

59. WAP to input a dictionary and display the maximum and minimum values

CODE:

```
d={}
n=int(input("How many keys do you
want to enter?: "))
for i in range (n):
    a=input("Enter key: ")
```

```
    b=input("Enter value: ")
    d[a]=b
print("The max value in the
dictionary is:",max(d.values()))
print("The min value in the
dictionary is:",min(d.values())
```

60. WAP to create a dictionary, showing a list of the no of items bought by people, the total cost and their phone number

CODE:

```
d={}
n=int(input("How many customers?:
"))
for i in range (n):
    l=[]
    a=input("Enter your name: ")
    items=input("Enter the items
bought: ")
    cost=input("Enter the cost: ")
```

```
    phone=input("Enter your phone
number: ")
    l.append(items)
    l.append(cost)
    l.append(phone)
    d[a]=l
print(d)
```

61. WAP to input the name and percentage of students and put them in dictionaries and delete a specified entry.

CODE:

```
d={}
n=int(input("How many students:
"))
for i in range (n):
    a=input("Enter name: ")
    b=input("Enter percentage: ")
    d[a]=b
print(d)
```

```
c=input("Which student's
information do you want to delete?:
")
del d[c]
print(d)
```

62. WAP to display an inputted dictionary of classes with their corresponding class teachers

CODE:

```
d={}
a=int(input("Enter the number of
classes: "))
for i in range (a):
    b=input("Enter a class name: ")
    c=input("Enter the name of the
Class Teacher: ")
    d[b]=c
```

```
print(d)

x=input("Enter the class whose
teacher you want to know: ")
print("The name of the teacher
is:",d.get(x))
```

Q63. WAP to display an inputted dictionary of people with their ages

CODE:

```
d={}
for i in range(5 ):
    a=input("Enter the name: ")
    b=input("Enter the age: ")
    d[a]=b
print(d)
```

64. WAP to display a dictionary with students and a list of all their marks in 5 subjects.

CODE:

```
d = {}
for i in range(5):
    s = 0
    l = []
    n = input("Enter your name: ")
    for j in range(5):
        m = int(input("Enter your marks in 5 subjects (out of 100): "))
        l.append(m)
        s += m
    percentage = (s/5)
```

```
    d[n] = l.copy()
print(d)
```

65. WAP to copy elements 44 and 55 from a given tuple into a new tuple.

CODE:

```
t1=eval(input("Enter a tuple: "))
t2=()
for i in t1:
    if i==44 or i==55:
        t2+=(i,)
print(t2)
```

66. WAP to check is all the elements in a tuple are same

CODE:

```
t=eval(input("Enter a tuple: "))
a=len(t)
b=t[0]
c=t.count(b)
if a==c:
    print("All elements are same!")
else:
    print("All elements are not same!")
```

67.WAP TO SWAP 2 TUPLES INPUT BY THE USER

CODE:

```
1=eval(input("Enter first tuple: "))
t2=eval(input("Enter second tuple: "))
print("The new first tuple is:",t2)
```

```
print("The new second tuple is:",t1)
```