**EXP:1**

**1.Write a python program for temperature converter.**

**Code :**

Celcius=float(input("enter the value of temperature"))

Fahrenheit=Celcius\*1.8+32

print("temperature in Fahrenheit " ,Fahrenheit )

**Output:**

enter the value of temperature 15

temperature in Fahrenheit 59.0 .

**2. Write a python program for calculating speed of vehicle.**

**Code :**

distance=float(input("enter the distance in km : "))

time=float(input("enter time required to travel in hours: "))

speed= distance/time

print("speed of vehicle is : ",speed)

**Output:**

enter the distance in km : 800

enter time required to travel in hours: 14

speed of vehicle is : 57.142857142857146

**3. Write a python program to calculate percentage of 6 subject.**

**Code :**

maths = 90

science = 99

english = 95

physics = 100

python= 99

dsd = 90

total\_marks=maths+science+english+physics+python+dsd

percentage = (total\_marks/600)\*100

print(total\_marks)

print(percentage)

**Output :**

573

95.5

**4. Write a python program to compare the string**

**Code:**

s1="piyush"

s2="piyush"

s3="rohit"

print(s1==s2)

print(s1==s3)

**Output:**

True

False

**5**. **Write a python program to Arrange string characters such that lowercase letters should come first**

**Code:**

string = "aBcDeF123"

lower\_chars = ''.join(char for char in string if char.islower())

upper\_chars = ''.join(char for char in string if char.isupper())

arranged\_string = lower\_chars + upper\_chars

print("Original String:", string)

print("Arranged String:", arranged\_string)

**Output :**

Original String: aBcDeF123

Arranged String: aceBDF

**6. Write a python program to Find all occurrences of a substring in a given string by ignoring the case**

**Code :**

main\_string = "This is a Test String. This is a Test."

substring = "this"

main\_string = main\_string.lower()

substring = substring.lower()

indices = []

index = 0

while True:

    index = main\_string.find(substring, index)

    if index == -1:

        break

    indices.append(index)

    index += 1

print(f"Occurrences of '{substring}' in '{main\_string}':")

for index in indices:

    print(f"Found at index: {index}")

**Output :**

Occurrences of 'this' in 'this is a test string. this is a test.':

Found at index: 0

Found at index: 23