TASK 1 : Running Python Script and various expressions in an interactive interpreter

CO1 – K3

1. Task 1: Running Python Script and various expressions in an interactive interpreter

Program 1:

Develop a program which prompts the user to input principle, rate and time and calculate compound interest. The formula is : CI = P(1+R/100)^T - P.

**Program:**

P = float(input("Enter the Principal amount: "))

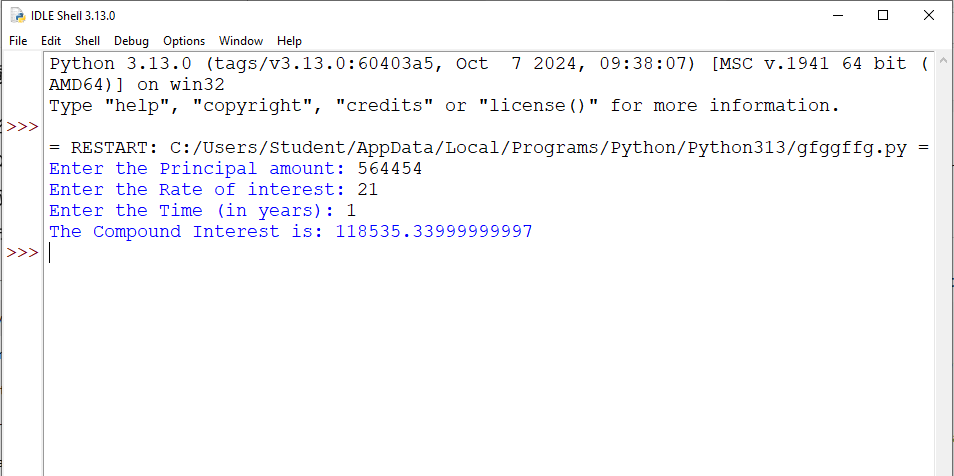
R = float(input("Enter the Rate of interest: "))

T = float(input("Enter the Time (in years): "))

CI = P \* (1 + R / 100) \*\* T - P

print("The Compound Interest is:", CI)

**output:**



Program 2:

According to a recent survey, Biryani is the most ordered food. Chef wants to learn how to make world-class Biryani from a MasterChef. Chef will be required to attend the MasterChef's classes for X weeks, and the cost of classes per week is Y coins. What is the total amount of money that Chef will have to pay?

**Program:**

X = int(input("Enter the number of weeks: "))

Y = int(input("Enter the cost per week (in coins): "))

total\_amount = X \* Y

print("The total amount Chef has to pay is:", total\_amount, "coins")

**Program 3:**

Create a program that reads the radius of a farmer’s field from the user in feet. Display the area of the field in acres.

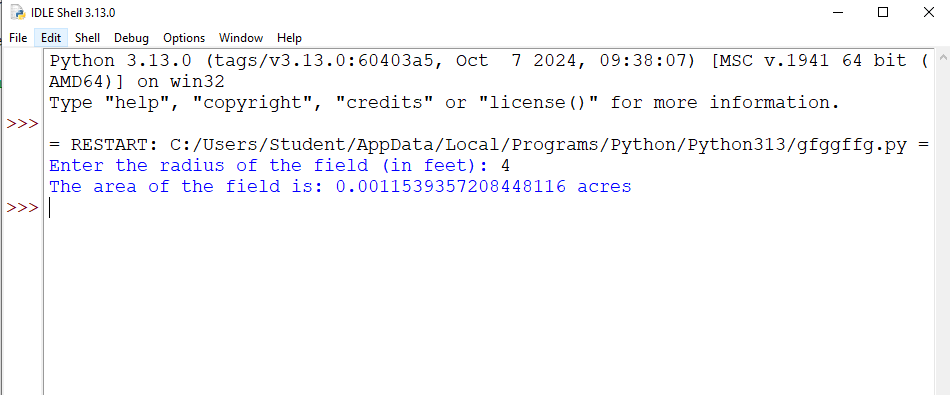
**Program:**

radius\_feet = float(input("Enter the radius of the field (in feet): "))

area\_sqft = 3.14159 \* radius\_feet \*\* 2

area\_acres = area\_sqft / 43560

print("The area of the field is:", area\_acres, "acres")



Program 4:

Two friends Ram and Sita are standing in a distance ‘d’ apart (Let’s take it as X and Y respectively) in a surface. How to find the distance between them?

Note : Formula to find the distance b/w two point:

**Program:**

x1 = float(input("Enter Ram's X coordinate: "))

y1 = float(input("Enter Ram's Y coordinate: "))

x2 = float(input("Enter Sita's X coordinate: "))

y2 = float(input("Enter Sita's Y coordinate: "))

distance = ((x2 - x1)\*\*2 + (y2 - y1)\*\*2) \*\* 0.5

print("The distance between Ram and Sita is:", distance)