

Homework: Handwritten

[You must know the details of the homework]

*** You have to face viva based on the given programs

1. Standard program to add two numbers in python

```
a = 25
b = 25
sum = a + b
print("The sum of two numbers is:", sum)
```

2. Write a Python program to print the following string in a specific format
Sample String : "Twinkle, twinkle, little star, How I wonder what you are! Up above the world so high, Like a diamond in the sky. Twinkle, twinkle, little star, How I wonder what you are"

Output :

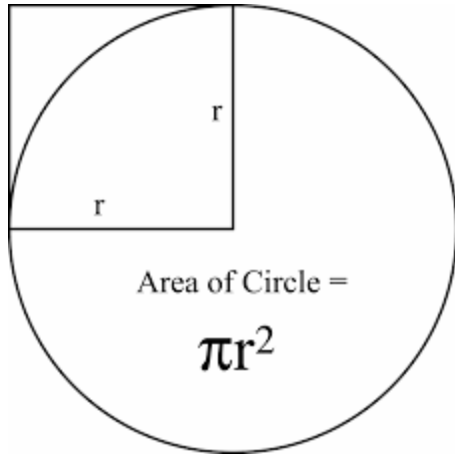
```
Twinkle, twinkle, little star,
    How I wonder what you are!
        Up above the world so high,
        Like a diamond in the sky.
Twinkle, twinkle, little star,
    How I wonder what you are
```

```
print("Twinkle, twinkle, little star, \n\tHow I wonder what you\nare! \n\t\tUp above the world so high, \n\t\t\tLike a diamond in\nthe sky. \nTwinkle, twinkle, little star, \n\tHow I wonder what\nyou are!")
```

3. Write a Python program that calculates the area of a circle based on the radius entered by the user.

Python: Area of a Circle

In geometry, the area enclosed by a circle of radius r is πr^2 . Here the Greek letter π represents a constant, approximately equal to 3.14159, which is equal to the ratio of the circumference of any circle to its diameter.



Python Code:

```
# Import the 'pi' constant from the 'math' module to calculate
the area of a circle
from math import pi
# Prompt the user to input the radius of the circle
r = float(input("Input the radius of the circle : "))
# Calculate the area of the circle using the formula: area =  $\pi * r^2$ 
area = pi * r ** 2
# Display the result, including the radius and calculated area
print("The area of the circle with radius " + str(r) + " is: " +
str(area))
```

Sample Output:

```
Input the radius of the circle : 1.1
The area of the circle with radius 1.1 is: 3.8013271108436504
```

4. Python: Print first and last name in reverse order with a space between them

```
# Prompt the user to input their first name and store it in the 'fname' variable
```

```
fname = input("Input your First Name : ")
```

```
# Prompt the user to input their last name and store it in the 'lname' variable
```

```
lname = input("Input your Last Name : ")
```

```
# Display a greeting message with the last name followed by the first name
```

```
print("Hello " + lname + " " + fname)
```

Sample Output:

```
Input your First Name : Dany
```

```
Input your Last Name : Boon
```

```
Hello Boon Dany
```

5. Float type conversion: Casting integer to float

```
num = 725
```

```
print(type(num))
```

```
# Output class 'int'
```

```
# converting float to integer
```

```
num1 = float(num)
```

```
print("Float number:", num1)
```

```
# Output 725.0
```

```
print(type(num1))
```

```
# Output class 'float'
```

6. Write a Python program that asks the user to input the names of three fruits.

Store the fruits in a list and display the entire list. Then, display each fruit individually by accessing them from the list.

```

# Program to create and access a list of fruits
fruit1 = input("Enter the name of the first fruit: ") # Take input for the first fruit
fruit2 = input("Enter the name of the second fruit: ") # Take input for the second
fruit
fruit3 = input("Enter the name of the third fruit: ") # Take input for the third fruit

# Create a list of fruits
fruits = [fruit1, fruit2, fruit3]

# Display the entire list
print("List of fruits:", fruits)

# Display each fruit
print("First fruit:", fruits[0])
print("Second fruit:", fruits[1])
print("Third fruit:", fruits[2])

```

7. Write a Python program that takes two numbers as input from the user, adds them, and displays the sum.

```

# Program to add two numbers
num1 = float(input("Enter the first number: ")) # Take input for the first number
num2 = float(input("Enter the second number: ")) # Take input for the second
number

# Perform addition
sum = num1 + num2

# Display result
print("The sum of", num1, "and", num2, "is:", sum)

```

8. Write a Python program that takes a temperature value in Celsius from the user and converts it into Fahrenheit using the formula:

$$\text{Fahrenheit} = (\text{Celsius} \times 9/5) + 32$$

Display the result.

```
# Program to convert Celsius to Fahrenheit
```

```
celsius = float(input("Enter the temperature in Celsius: ")) # Take input for Celsius
```

```
# Formula to convert Celsius to Fahrenheit
```

```
fahrenheit = (celsius * 9/5) + 32
```

```
# Display result
```

```
print("Temperature in Fahrenheit:", fahrenheit)
```