Python Day 1 Assignment:

Duration 1.5 hours

Submission:

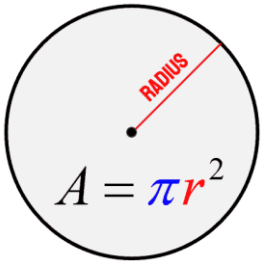
Use Markdown for the questions and include appropriate comments while answering.

Save your Jupyter Notebook with a meaningful filename (e.g., "Introduction_to_Python_Assignment.ipynb").

Upload the completed notebook to your folder in MS Teams.

1. Create variables for the following information:
   - Your full name
   - Your age
   - Your favourite number (use an integer)

   Print each variable with an appropriate label.
2. Write a Python program to calculate the area of a rectangle given its length and width.
3. Write a Python program which accepts the radius of a circle from the user and compute the area.



$\pi \approx 3.1416$

4. Convert temperature from 5 Degree Celsius to Fahrenheit.

$$F=59\times C+32$$

5. Implement a program that converts a given number from a user of minutes into hours and minutes.

6. Write a python code to convert values entered by user from mile to km or from km to mile.

7. Request the user to input a distance and the time taken to cover that distance. Calculate and print the speed using the formula :

Speed = distance / time

8. Ask the user to input an amount in one currency. Implement a simple currency converter to convert the amount to another currency. You may choose specific currencies.

9. Write a program that calculates the compound interest using the formula:

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

A = Future Value,

P = Principal Amount

r = Annual interest rate

n = Number of times interest is compounded per year

t = Time in years

10. Prompt the user to enter an integer. Determine whether the entered number is odd or even and display the result.

Example answers :

Task 1: Simple Calculator

```
# this is a single line comment
num1 = float(input("Enter the first number: "))
num2 = float(input("Enter the second number: "))
# Addition
addition_result = num1 + num2
print(f"Addition: {addition_result}")
```