



SUMMER CAMP - 26



Assignment # 2

Instructions: Write a complete, runnable Python program for each task below. Use a variable when asked, follow proper indentation, and test your code before submission. Show your output as a comment at the end of each program where applicable.

Section 1: Temperature Conversions

Task 1 Part (A): Celsius to Fahrenheit & Kelvin

Ask the user for a temperature in Celsius (C) and convert it to Fahrenheit (F) and Kelvin (K).

Fahrenheit (F) = $(9/5 \times C) + 32$, Kelvin (K) = $C + 273.15$

Sample Input / Output:

```
Enter temprature in Celsius: 12.3  
F = 54.14, K = 285.45
```

Task 1 Part (B): Fahrenheit to Celsius & Kelvin

Ask the user for a temperature in Fahrenheit (F) and convert it to Celsius (C) and Kelvin (K).

Celsius (C) = $(F - 32) \times 5/9$ Kelvin (K) = $(F - 32) \times 5/9 + 273.15$

Sample Input / Output:

```
Enter the temprature in Fahrenheit: 54.14  
C = 12.30, K = 285.45
```

Task 1 Part (C): Kelvin to Celsius & Fahrenheit

Ask the user for a temperature in Kelvin (K) and convert it to Celsius (C) and Fahrenheit (F).

Celsius (C) = $K - 273.15$ Fahrenheit (F) = $(K - 273.15) \times 9/5 + 32$

Sample Input / Output:

```
Enter the temprature in Kelvin: 285.45  
C = 12.30, F = 54.14
```

Section 2: Variables & Basic I/O

Task 1: Add Two Numbers

Ask the user for two numbers and print their sum.

Sample Input / Output:

```
Enter First Number: 12  
Enter Second Number: 5  
Sum: 17
```



SUMMER CAMP - 26



Task 2: Multiply Two Numbers

Ask the user for two numbers and print their product.

Sample Input / Output:

```
Enter First Number: 5
Enter Second Number: 5
Product: 25
```

Task 3: Name and Age

Ask the user for their name and age and display them together.

Sample Input / Output:

```
Enter your name: Bill
Enter your age: 20
Hello Bill, you are 20 years old
```

Section 3: While Loops

Task 1 Part (A): Multiplication Tables — Fixed Count

Write a Python program that:

1. Ask the user how many multiplication tables they want to print.
2. Uses a while loop that runs that many times.
3. During each iteration, ask the user to enter a number.
4. Prints the table of that number from 1 to 10 before asking for the next.

Sample Input / Output:

```
How many tables do you want to print? 1
Enter a number: 5
Table of 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

Task 1 Part (B): Multiplication Tables — Continue Until User Stops

Create a script in Python that performs the following:

1. Avoids requesting the total number of tables initially.
2. Employs an infinite loop (while True) until terminated by the user.
3. Prompts for an input value and generates its 1-10 multiplication sequence per cycle.
4. Queries the user: "Do you want to continue? (Y/N)" following each table display.



SUMMER CAMP - 26

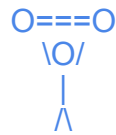


5. Terminates the execution if the response is "N".
6. Displays a "Goodbye!" message once the loop concludes.

Sample Input / Output:

```
Enter a number: 5
Table of 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
Do you want to continue? (Y/N): Y
```

Good Luck



Happy Coding!
