Baitussalam Techpark - Python Bootcamp
Lab 1

Problem: Indoor Voice

Question: Implement a program that prompts the user for input and then outputs that same input in lowercase.

Input Example:

```
HELLO
```

Output Example:

```
hello
```

Problem: Playback Speed

Question: Create a program that prompts the user for input and outputs the same input, but with each space replaced by three periods (. . .).

Input Example:

```
Hello world
```

Output Example:

```
Hello...world
```

Question: Write a program that replaces emoticons in a given input with corresponding emojis. Specifically, convert :) to 😊 and :(to ☹.

Input Example:

```
Hello :)
```

Output Example:

Hello ☺

Problem: Einstein

Question: Implement a program that calculates the energy equivalent of a given mass using Einstein's equation $E = mc^2$, where E is energy, m is mass, and c is the speed of light (approximately 300,000,000 meters per second).

Input Example:

```
Mass: 1
```

Output Example:

```
Energy: 90000000000000000
```

Problem: Tip Calculator

Question: Create a program that calculates the tip based on the cost of a meal and the desired tip percentage. The program should prompt the user for the cost of the meal (e.g., `$50.00`) and the tip percentage (e.g., `15%`), then output the amount to leave as a tip.

Input Example:

```
Cost of meal: $50.00
Tip percentage: 15%
```

Output Example:

```
Tip: $7.50
```