

Python_Input_Function_3

June 2, 2025

1 Question:

How do you prevent a user from entering an empty string?

Answer:

```
[2]: user_input = input("Enter something: ").strip()
      if not user_input:
          print("Input cannot be empty.")
      else:
          print(f"You entered: {user_input}")
```

Enter something:

Input cannot be empty.

```
[3]: user_input = input("Enter something: ").strip()
      if not user_input:
          print("Input cannot be empty.")
      else:
          print(f"You entered: {user_input}")
```

Enter something: hello

You entered: hello

2 Question:

Write a program to check if an entered number is a perfect square.

Answer:

```
[4]: import math
      num = int(input("Enter a number: "))
      if math.isqrt(num) ** 2 == num:
          print("Perfect square")
      else:
          print("Not a perfect square")
```

Enter a number: 56

Not a perfect square

```
[5]: import math
      num = int(input("Enter a number: "))
      if math.isqrt(num) ** 2 == num:
          print("Perfect square")
      else:
          print("Not a perfect square")
```

Enter a number: 36

Perfect square

3 Question:

Write a program that asks the user for a year and determines if it's a leap year.

Answer:

```
[7]: year = int(input("Enter a year: "))
      if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):
          print("Leap year")
      else:
          print("Not a leap year")
```

Enter a year: 2025

Not a leap year

```
[8]: year = int(input("Enter a year: "))
      if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):
          print("Leap year")
      else:
          print("Not a leap year")
```

Enter a year: 2028

Leap year

4 Question:

How can you remove leading and trailing spaces from a string input?

Answer:

```
[13]: user_input = input("Enter something: ").strip()
```

Enter something: Hello World!

```
[14]: user_input
```

```
[14]: 'Hello    World!'
```

5 Question:

How do you handle incorrect inputs when you expect an integer using `input()`?

Answer:

```
[15]: try:
        num = int(input("Enter a number: "))
    except ValueError:
        print("Invalid input! Please enter a valid integer.")
```

```
Enter a number: 5.5
```

```
Invalid input! Please enter a valid integer.
```

```
[16]: try:
        num = int(input("Enter a number: "))
    except ValueError:
        print("Invalid input! Please enter a valid integer.")
```

```
Enter a number: 5
```

6 Question:

Write a program that accepts a string and counts the occurrence of a particular character.

Answer:

```
[17]: text = input("Enter a string: ")
      char = input("Enter a character to count: ")
      print(f"Occurrence of {char}: {text.count(char)}")
```

```
Enter a string: Hello World!
```

```
Enter a character to count: l
```

```
Occurrence of l: 3
```

7 Question:

How would you convert user input to lowercase using `input()`?

Answer:

```
[19]: user_input = input("Enter a string: ").lower()
      user_input
```

```
Enter a string: My Name is LOL
```

```
[19]: 'my name is lol'
```

8 Question:

Write a program that accepts a number and prints whether it is a multiple of 10.

Answer:

```
[20]: num = int(input("Enter a number: "))
      if num % 10 == 0:
          print("Multiple of 10")
      else:
          print("Not a multiple of 10")
```

Enter a number: 89

Not a multiple of 10

```
[21]: num = int(input("Enter a number: "))
      if num % 10 == 0:
          print("Multiple of 10")
      else:
          print("Not a multiple of 10")
```

Enter a number: 100

Multiple of 10

9 Question:

How would you check if a string contains only alphabets using `input()`?

Answer:

```
[22]: user_input = input("Enter a string: ")
      if user_input.isalpha():
          print("Only alphabets")
      else:
          print("Contains non-alphabet characters")
```

Enter a string: hELLO

Only alphabets

```
[23]: user_input = input("Enter a string: ")
      if user_input.isalpha():
          print("Only alphabets")
      else:
          print("Contains non-alphabet characters")
```

Enter a string: 15555

Contains non-alphabet characters

10 Question:

Write a program to count the number of words in a sentence entered by the user.

Answer:

```
[24]: text = input("Enter a sentence: ")  
      print("Number of words:", len(text.split()))
```

Enter a sentence: WOW, I am loving it!

Number of words: 5