Week1_Assignment - Renduchintala Navya - 2306AML112

1. Write a program that asks the user to enter a letter. Then it generates a random number between 1 and 10 and prints out the letter that many times

In [2]:
```
import random

letter = input("Enter a letter: ")
random_number = random.randint(1, 10)

output = letter * random_number
print(output)
```

```
Enter a letter: N
NNNNN
```

2. In the game Yahtzee, players roll five dice. A Yahtzee is when all five dice are the same. Write a program that simulates rolling five 10,000 times and counts how many Yahtzees occur. Print out what percentage of the rolls come out to be Yahtzees.

In [29]:
```
import random

num_rolls = 10000
yahtzee_count = 0

for num in range(num_rolls):
    dice = [random.randint(1, 6) for num in range(5)]
    if dice.count(dice[0]) == 5:
        yahtzee_count += 1

percentage = round((yahtzee_count / num_rolls) * 100,2)

print("Number of Yahtzees:", yahtzee_count)
print("Percentage of Yahtzees:", percentage)
```

```
Number of Yahtzees: 4
Percentage of Yahtzees: 0.04
```

3. Write a program that asks the user to enter a sentence, removes all the spaces from the sentence, converts the remainder to uppercase, and prints out the result.

In [30]:
```
sentence = input("Enter a sentence: ")

sentence_without_spaces = sentence.replace(" ", "")

result = sentence_without_spaces.upper()

print("Result:", result)
```

```
Enter a sentence: Python is a programming language.
Result: PYTHONISAPROGRAMMINGLANGUAGE.
```

4. Write a program that asks the user to enter a string. If the string is at least five characters long, then create a new string that consists of the first five characters of the string along with three asterisks at the end. Otherwise add enough exclamation points (!) to the end of the string in order to get the length up to five.

In [1]:
```
string = input("Enter a string: ")

if len(string) >= 5:
    new_string = string[:5] + "***"
else:
    new_string = string + "!" * (5 - len(string))

print("New string:", new_string)
```

```
Enter a string: Renduchintala
New string: Rendu***
```

5. Write a program that ask the user to enter a string that consists of multiple

words. Then print out the first letter of each word, all on the same line.

In [34]:
```
sentence = input("Enter a sentence: ")

words = sentence.split()

for word in words:
    print(word[0], end=' ')

print()
```

```
Enter a sentence: Python is a programming language.
P i a p l
```