ASSIGNMENT-1

1.
```
import random
Letter = input("Enter a letter: ")
 numbr = random.randint(1, 10)
 for _ in range(numbr):
 print(Letter, end='')
```

2.
```
import random
rolls = 10000
dice = 5
sides = 6
yahtzee_count = 0
 for _ in range(rolls):
      dice = [random.randint(1, sides) for _ in range(dice)]
if dice.count(dice[0]) == dice:
    yahtzee_count += 1
percentage_yahtzee = (yahtzee_count / rolls) * 100
print("Percentage of Yahtzees: {:.2f}%".format(percentage_yahtzee))
```

3.
```
sentence = input("Enter a sentence: ")
sentence_without_spaces = sentence.replace(" ", "")
 result = sentence_without_spaces.upper()
print("Result:", result)
```

4.
```
string = input("Enter a string: ")
if len(string) >= 5:
   new_string = string[:5] + "***"
 else:
    new_string = string + "!" * (5 - len(string))
 print("Result:", new_string)
```

5.
```
sentence = input("Enter a sentence: ")
words = sentence.split()
first_letters = [word[0] for word in words]
print("First letters:", ''.join(first_letters))
```

ASSIGNEMENT -2

1(a)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
    # Print the total number of items in the list
    print("Total number of items in the list:", len(int_list))
```

1(b)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
    fourth_item = int_list[3]
    print("Fourth item in the list:", fourth_item)
```

1(c)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
    last_three_items = int_list[-3:]
    print("Last three items in the list:", last_three_items)
```

1(d)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
    items_except_first_two = int_list[2:]
    print("Items in the list except the first two:", items_except_first_two)
```

1(e)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
    print("List in reverse order:", int_list[::-1])
```

1(f)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
    print("Largest value in the list:", max(int_list))
    print("Smallest value in the list:", min(int_list))
```

1(g)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
```

```
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
        print("Sum of all the values in the list:", sum(int_list))
```

1(h)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
elif 0 in int_list:
        zero_index = int_list.index(0)
        print("Index of the first zero in the list:", zero_index)
    else:
        print("There are no zeroes in the list.")
```

1(i)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
else:
   sorted_list = sorted(int_list)

    print("List after sorting:", sorted_list)
```

1(j)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
    print("Please enter at least five integers.")
```

```
else:
        sorted_list = sorted(int_list)
        del sorted_list[0]
        print("List after deleting the first item:", sorted_list)
```

1(k)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
   print("Please enter at least five integers.")
else:
    sorted_list = sorted(int_list)
    sorted_list[-2] = 9876
    print("List after changing the second-to-last item:", sorted_list)
```

1(l)

```
user_input = input("Enter a list of integers, separated by spaces: ")
input_list = user_input.split()
int_list = [int(num) for num in input_list]
if len(int_list) < 5:
   print("Please enter at least five integers.")
else:
    sorted_list = sorted(int_list)
    sorted_list.append(-500)
    print("List after appending -500:", sorted_list)
```

2.

```
user_input = input("Enter a list of numbers, separated by spaces: ")
input_list = user_input.split()
float_list = [float(num) for num in input_list]
if not float_list:
print("The list is empty.")
else:
smallest_value = min(float_list)
smallest_index = float_list.index(smallest_value)
print("Smallest value in the list:", smallest_value)
print("First index of the smallest value:", smallest_index)
```

3.

```
user_input = input("Enter a string of lowercase letters: ")
letter_counts = [0] * 26
for char in user_input:
    if 'a' <= char <= 'z':
        letter_counts[ord(char) - ord('a')] += 1
for  i, count in enumerate(letter_counts ):
    letter = chr(ord('a') + i)
    print(f"Number of {letter}'s: {count}")
```

4.

```
my_dict = {'abc': 7, 'def': 11, 'ghi': 13, 'jkl': 17, 'mno': 19}
# Print the value associated with the key 'def'
print("Value associated with 'def':", my_dict['def'])
# Print all the keys using the keys() method
print("Keys in the dictionary:", my_dict.keys())
# Loop over the dictionary and print keys and their associated values
print("Keys and their values:")
```

```
for key, value in my_dict.items():
    print(key, "->", value)
# Check if the dictionary contains the key 'pqr' and print a message
if 'pqr' in my_dict:
    print("'pqr' key is present in the dictionary.")
else:
    print("'pqr' key is not present in the dictionary.")
# Change the value associated with the key 'abc' to 23
my_dict['abc'] = 23
# Print all the values in the dictionary using the values() method
print("Values in the dictionary:", my_dict.values())
```