Functions

Q1:

Write a Python Program to find the sum of the digits of the number recursively.

Q2:

Write a Python Program to find the binary equivalent of a number recursively.

Q3

Write a Python Program to check whether a given number is even or odd using betwise Ops

Q4:

This is a Python Program to find the GCD of two numbers using recursion.

Q5:

This is a Python Program to find the product of two numbers using recursion.

Q6:

This is a Python Program to check whether a string is a palindrome or not using recursion.

Dictionary:

- 1. Which of the following statements create a dictionary?
- a) $d = {}$
- b) d = {"john":40, "peter":45}
- c) $d = \{40:"john", 45:"peter"\}$
- d) All of the mentioned
- 2. What will be the output of the following Python code snippet?

```
1. d = {"john":40, "peter":45}
```

- a) "john", 40, 45, and "peter"
- b) "john" and "peter"
- c) 40 and 45
- d) d = (40:"john", 45:"peter")

3. What will be the output of the following Python code snippet?

```
1. d = {"john":40, "peter":45}
2. "john" in d
```

- a) True
- b) False
- c) None
- d) Error
- 4. What will be the output of the following Python code snippet?

```
1. d1 = {"john":40, "peter":45}
2. d2 = {"john":466, "peter":45}
3. d1 == d2
```

- a) True
- b) False
- c) None
- d) Error
- 5. What will be the output of the following Python code snippet?

```
1. d1 = {"john":40, "peter":45}
2. d2 = {"john":466, "peter":45}
3. d1 > d2
```

- a) True
- b) False
- c) Error
- d) None
- 6. What will be the output of the following Python code snippet?

```
1. d = {"john":40, "peter":45}
2. d["john"]
```

- a) 40
- b) 45
- c) "john"
- d) "peter"
- 7. Suppose d = {"john":40, "peter":45}, to delete the entry for "john" what command do we use?
- a) d.delete("john":40)
- b) d.delete("john")
- c) del d["john"]
- d) del d("john":40)

```
8. Suppose d = {"john":40, "peter":45}. To obtain the number of entries in dictionary which command do we use?
```

- a) d.size()
- b) len(d)
- c) size(d)
- d) d.len()

9. What will be the output of the following Python code snippet?

```
1. d = {"john":40, "peter":45}
2. print(list(d.keys()))
```

- a) ["john", "peter"]
- b) ["john":40, "peter":45]
- c) ("john", "peter")
- d) ("john":40, "peter":45)
- 10. Suppose d = {"john":40, "peter":45}, what happens when we try to retrieve a value using the expression d["susan"]?
- a) Since "susan" is not a value in the set, Python raises a KeyError exception
- b) It is executed fine and no exception is raised, and it returns None
- c) Since "susan" is not a key in the set, Python raises a KeyError exception
- d) Since "susan" is not a key in the set, Python raises a syntax error