Assignment 3

1. Define division.
2. Define classification.
3. Describe regression.
4. Define clustering.
5. Explain association rule mining.
6. Write buggy code for the function below.

```python
def buggy_function(x):
    return x * 2
```

7. What is the output of the following code snippet?

```python
print(1 + 2 * 3)
```

8. Write a function to calculate the factorial of a number.

```python
def factorial(n):
    if n == 0:
        return 1
    else:
        return n * factorial(n-1)
```

9. What is the output of the following code snippet?

```python
print(factorial(5))
```

10. Briefly explain the importance of data cleaning in data mining.

11. Explain the role of data preprocessing in data mining.

12. Describe the process of data transformation in data mining.

13. Explain the importance of data quality in data mining.

14. Discuss the challenges and opportunities in data mining.

15. What are the key steps involved in data mining?

16. Explain the role of data mining in business intelligence.

17. What are the advantages and disadvantages of data mining?