Day 12
Dharunya
1. Write a python program which defines a function to find maximum of 3 numbers. Read the numbers as input and pass as argument to the function.

```python
def find_maximum(a, b, c):
    return max(a, b, c)
num1 = int(input("Enter num1: "))
num2 = int(input("Enter num2: "))
num3 = int(input("Enter num3: "))
maximum = find_maximum(num1, num2, num3)
print(f"max num: {maximum}")
```

Output:
python max.py
Enter num1: 10
Enter num2: 20
Enter num3: 90
max num: 90

2.Write a python program to read string as input and check whether it is a palindrome.

```python
text = input("Enter a text: ")
if text == text[::-1]:
    print("The text is a palindrome.")
else:
    print("The text is not a palindrome.")
```

Output:
python pali.py
Enter a text: madam
The text is a palindrome.

3.Write a Java program which performs file copy.

```java
package com.training.ooc;
import java.io.*;
public class FileCopy {
  public static void main(String[] args) {
      File inputFile = new
File("C:\\Users\\dharunya.s\\eclipse-workspace\\demo\\src\\com\\training\\ooc\\source.txt");
      File outputFile = new File("destination.txt");
      try (
        FileReader in = new FileReader(inputFile);
        FileWriter out = new FileWriter(outputFile)
      ) {
        int c;
```

```java
        while ((c = in.read()) != -1) {
            out.write(c);
        }
        System.out.println("File copied successfully.");
    } catch (IOException e) {
        System.out.println("Error during file copy: " + e.getMessage());
    }
  }
}
```

Source.txt
this is source file
Destination.txt
this is source file

4.Write a python program to find the number of lines, words and characters in a file.

```python
def count_file_details(filename):
    with open(filename, 'r') as file:
        lines = file.readlines()

    num_lines = len(lines)
    num_words = sum(len(line.split()) for line in lines)
    num_chars = sum(len(line) for line in lines)

    print(f"Lines: {num_lines}")
    print(f"Words: {num_words}")
    print(f"Characters: {num_chars}")

filename = "sample.txt"
count_file_details(filename)
```
Sample.txt
hello world
Output:
python file.py
Lines: 1
Words: 2
Characters: 12