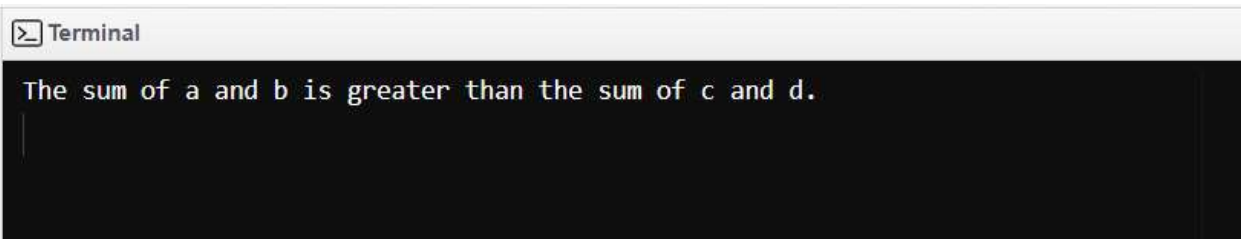


Introductions to Java

Task 1: Check if Sum of a and b is Greater than Sum of c and d

```
public class SumComparison {  
    public static void main(String[] args) {  
        int a = 5;  
        int b = 10;  
        int c = 3;  
        int d = 6;  
        if (a + b > c + d) {  
            System.out.println("The sum of a and b is greater than the sum of c  
and d.");  
        } else {  
            System.out.println("The sum of a and b is not greater than the sum  
of c and d.");  
        }  
    }  
}
```

Output:

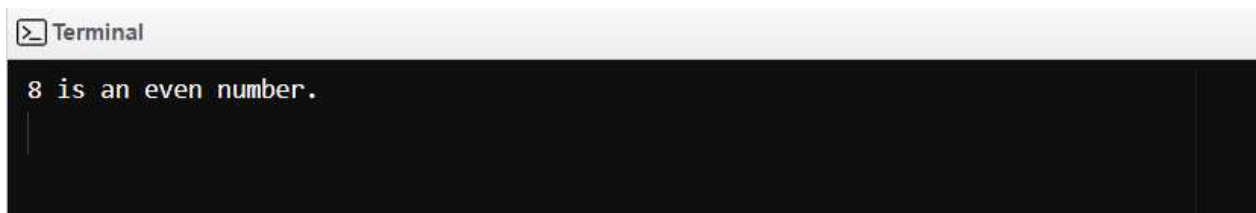
A terminal window with a title bar that says "Terminal". The window has a dark background and shows the output of the Java program: "The sum of a and b is greater than the sum of c and d." followed by a cursor on the next line.

```
Terminal  
The sum of a and b is greater than the sum of c and d.  
|
```

Task 2: Check if a Number is Even

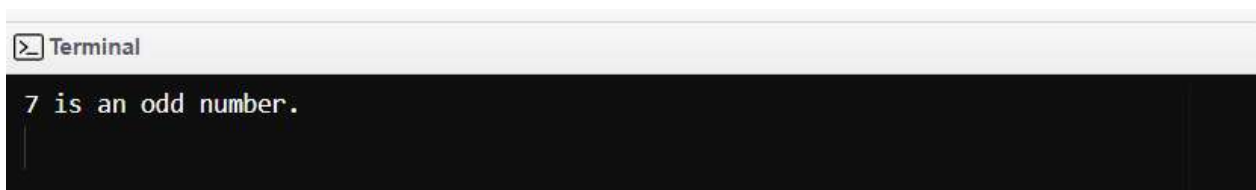
```
public class EvenCheck {  
    public static void main(String[] args) {  
        int number = 8;  
        if (number % 2 == 0) {  
            System.out.println(number + " is an even number.");  
        } else {  
            System.out.println(number + " is an odd number.");  
        }  
    }  
}
```

Output 1:

A screenshot of a terminal window with a title bar that says "Terminal". The terminal has a black background and white text. It displays the output "8 is an even number." followed by a cursor on the next line.

```
> Terminal  
8 is an even number.  
|
```

Output 2:

A screenshot of a terminal window with a title bar that says "Terminal". The terminal has a black background and white text. It displays the output "7 is an odd number." followed by a cursor on the next line.

```
> Terminal  
7 is an odd number.  
|
```

Task 3: Print Characters from A to Z

```
public class PrintAlphabets {  
    public static void main(String[] args) {  
        for (char ch = 'A'; ch <= 'Z'; ch++) {  
            System.out.print(ch + " ");  
        }  
    }  
}
```

Output:

A screenshot of a terminal window with a title bar that says "Terminal". The terminal has a black background and displays the output of the Java program: the uppercase letters A through Z, separated by single spaces. A vertical cursor line is positioned at the end of the output, after the letter Z.

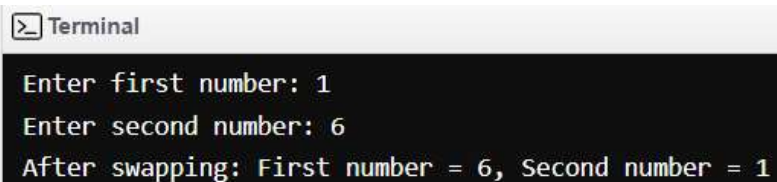
```
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
```

Task 4: Swap Two Numbers

```
import java.util.Scanner;

public class SwapNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter first number: ");
        int num1 = scanner.nextInt();
        System.out.print("Enter second number: ");
        int num2 = scanner.nextInt();
        int temp = num1;
        num1 = num2;
        num2 = temp;
        System.out.println("After swapping: First number = " + num1 + ", Second number = " + num2);
    }
}
```

Output:

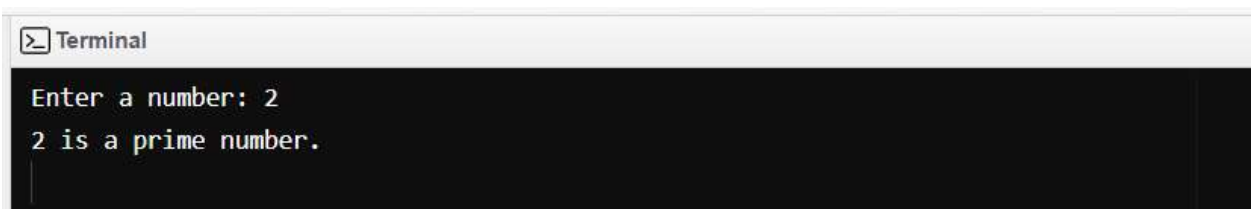
A screenshot of a terminal window with a title bar that says "Terminal". The terminal has a black background with white text. It shows the output of the Java program: "Enter first number: 1", "Enter second number: 6", and "After swapping: First number = 6, Second number = 1".

```
Terminal
Enter first number: 1
Enter second number: 6
After swapping: First number = 6, Second number = 1
```

Task 5: Check if a Number is Prime

```
import java.util.Scanner;
public class PrimeCheck {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number: ");
        int number = scanner.nextInt();
        boolean isPrime = true;
        if (number <= 1) {
            isPrime = false;
        } else {
            for (int i = 2; i <= number / 2; i++) {
                if (number % i == 0) {
                    isPrime = false;
                }
            }
        }
        if (isPrime) {
            System.out.println(number + " is a prime number.");
        } else {
            System.out.println(number + " is not a prime number.");
        }
    }
}
```

Output 1:

A terminal window with a title bar that says "Terminal". The window has a dark background. The text inside the terminal is "Enter a number: 2" followed by "2 is a prime number." on the next line. The cursor is at the end of the second line.

```
Terminal
Enter a number: 2
2 is a prime number.
```

Output 2:

```
Terminal
Enter a number: 76
76 is not a prime number.
```

Task 6: Factorial of a Given Number

```
import java.util.Scanner;
```

```
public class Factorial {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number: ");
        int number = scanner.nextInt();
        long factorial = 1;
        for (int i = 1; i <= number; i++) {
            factorial *= i;
        }
        System.out.println("Factorial of " + number + " is " + factorial);
    }
}
```

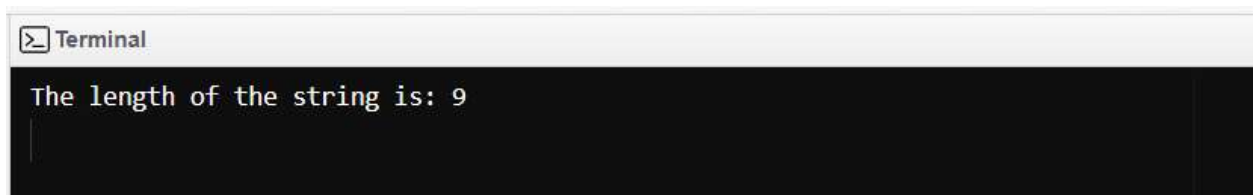
Output:

```
Terminal
Enter a number: 7
Factorial of 7 is 5040
```

Task 7: Print the Length of a String

```
public class StringLength {  
    public static void main(String[] args) {  
        String msg = "Guvi Geek";  
        System.out.println("The length of the string is: " + msg.length());  
    }  
}
```

Output:

A screenshot of a terminal window with a title bar that says "Terminal". The terminal has a black background and white text. It displays the output of the Java program: "The length of the string is: 9".

```
Terminal  
The length of the string is: 9
```

Task 8: Print "Welcome to Guvi" 10 Times

```
public class PrintWelcome {  
    public static void main(String[] args) {  
        for (int i = 0; i < 10; i++) {  
            System.out.println("Welcome to Guvi");  
        }  
    }  
}
```

Output:

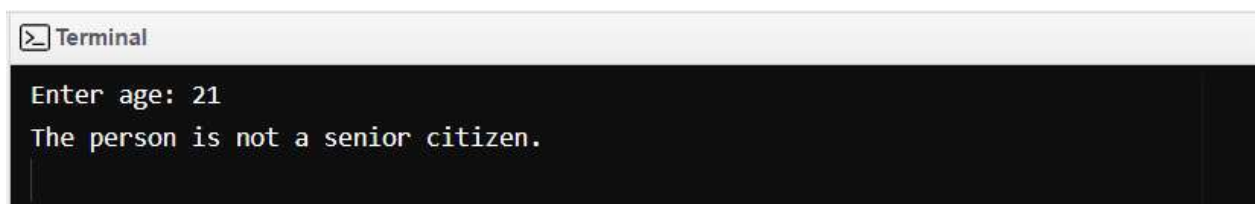
[illegible]

Task 9: Check if a Person is a Senior Citizen

```
import java.util.Scanner;

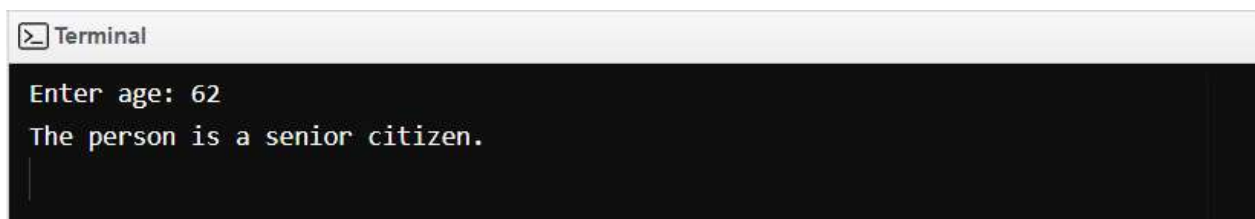
public class SeniorCitizenCheck {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter age: ");
        int age = scanner.nextInt();
        if (age >= 60) {
            System.out.println("The person is a senior citizen.");
        } else {
            System.out.println("The person is not a senior citizen.");
        }
    }
}
```

Output 1:



```
Terminal
Enter age: 21
The person is not a senior citizen.
```

Output 2:



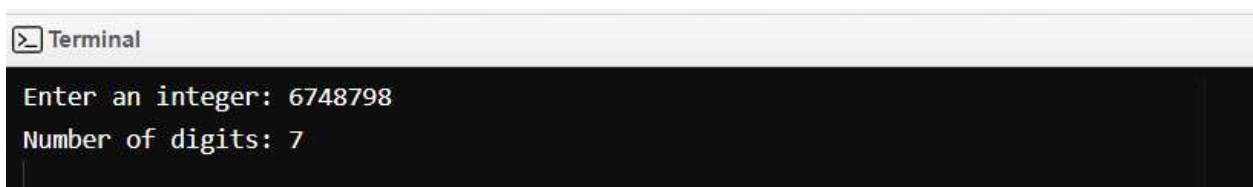
```
Terminal
Enter age: 62
The person is a senior citizen.
```

Task 10: Count Number of Digits in an Integer

```
import java.util.Scanner;

public class DigitCount {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter an integer: ");
        int number = scanner.nextInt();
        int count = 0;
        while (number != 0) {
            number /= 10;
            count++;
        }
        System.out.println("Number of digits: " + count);
    }
}
```

Output:

A terminal window titled "Terminal" with a dark background. It shows the program's execution: the prompt "Enter an integer: " is followed by the input "6748798". The next line shows the output "Number of digits: 7".

```
Terminal
Enter an integer: 6748798
Number of digits: 7
```