LAB TASK 2

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SOFTWARE CONSTRUCTION AND DEVELOPMENT

SOFTWARE ENGINEERING GREEN

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Odd Even checker:

```java
import java.util.Scanner;

class EvenOddChecker {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number: ");
        int number = scanner.nextInt();
        if (number % 2 == 0) {
            System.out.println("Even");
        } else {
            System.out.println("Odd");
        }
        scanner.close();
    }
}
```

Output:

```
$?) { java EvenOddChecker }
Enter a number: 6
Even
PS C:\Users\mrabu\Desktop\6th Semester\SCD Lab\Lab T
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
er.java } ; if ($?) { java EvenOddChecker }
Enter a number: 5
Odd
```

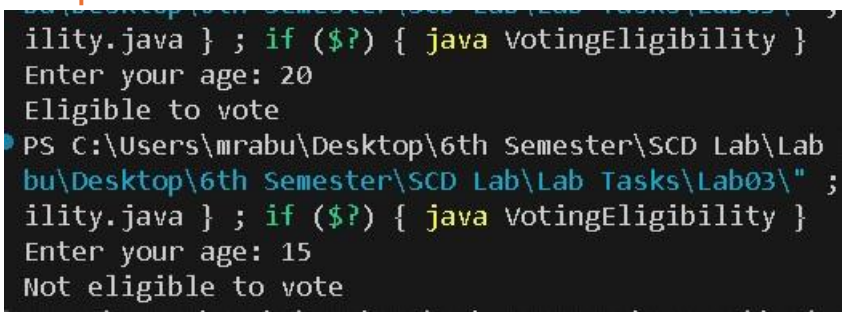
Under 18 Voter Eligibility:

```java
import java.util.Scanner;

class VotingEligibility {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter your age: ");         int age =
scanner.nextInt();          if (age >= 18) {
            System.out.println("Eligible to vote");
        } else {
                System.out.println("Not eligible to vote");

        scanner.close();
    }
}
```

Output:



Grade Calculator:

```
import java.util.Scanner;

class GradeCalculator {     public static void main(String[] args)
{         Scanner scanner = new
Scanner(System.in);         System.out.print("Enter your score:
");         int score = scanner.nextInt();         if (score >= 90) {
            System.out.println("Grade: A");
        } else if (score >= 80) {
            System.out.println("Grade: B");
        } else if (score >= 70) {
            System.out.println("Grade: C");
        } else if (score >= 60) {
            System.out.println("Grade: D");
        } else {
            System.out.println("Grade: F");
        }
        scanner.close();
    }
}
```

Output:

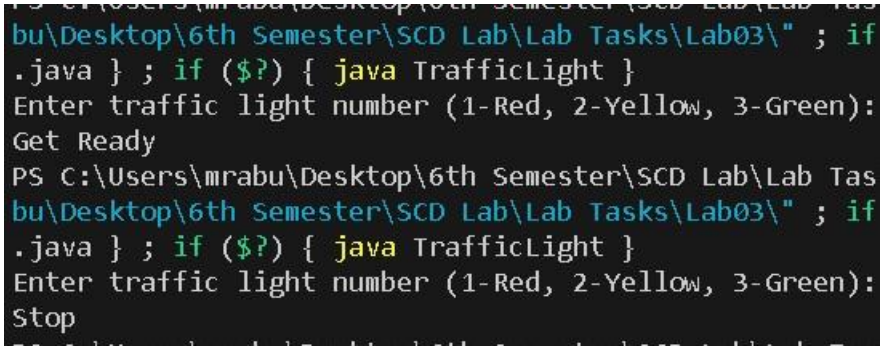
```
) { javac GradeCalculator.java } ; if ($?) { java G
Enter your score: 88
Grade: B
PS C:\Users\mrabu\Desktop\6th Semester\SCD Lab\Lab
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
tor.java } ; if ($?) { java GradeCalculator }
Enter your score: 49
Grade: F
PS C:\Users\mrabu\Desktop\6th Semester\SCD Lab\Lab
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
tor.java } ; if ($?) { java GradeCalculator }
Enter your score: 70
Grade: C
```

Traffic Light System:

```
import java.util.Scanner;

class TrafficLight {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter traffic light number (1-Red, 2-Yellow, 3-
Green): ");         int light = scanner.nextInt();         switch (light)
{             case 1:
                System.out.println("Stop");                 break;
case 2:
                System.out.println("Get
Ready");                 break;             case 3:
                System.out.println("Go");                 break;             d
efault:
                System.out.println("Invalid input");
        }
        scanner.close();
    }
}
```

Output:



Months print:

```
import java.util.Scanner;

class MonthPrinter {     public static void main(String[] args)
{         Scanner scanner = new
Scanner(System.in);         System.out.print("Enter month number (1-12): ");
        int month = scanner.nextInt();         switch (month)
{             case 1: System.out.println("January"); break;             case
2: System.out.println("February"); break;             case 3:
System.out.println("March"); break;             case 4:
System.out.println("April"); break;             case 5:
System.out.println("May"); break;             case 6:
System.out.println("June"); break;             case 7:
System.out.println("July"); break;             case 8:
System.out.println("August"); break;             case 9:
System.out.println("September"); break;             case 10:
System.out.println("October"); break;             case 11:
System.out.println("November"); break;             case 12:
System.out.println("December"); break;             default:
System.out.println("Invalid month number");
        }
        scanner.close();
    }
}
```

Output:

```
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
.java } ; if ($?) { java MonthPrinter }
Enter month number (1-12): 6
June
PS C:\Users\mrabu\Desktop\6th Semester\SCD Lab\Lab T
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
.java } ; if ($?) { java MonthPrinter }
Enter month number (1-12): 3
March
PS C:\Users\mrabu\Desktop\6th Semester\SCD Lab\Lab T
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
.java } ; if ($?) { java MonthPrinter }
Enter month number (1-12): 12
December
```

Sum of Even Numbers 1 – 50:

```
class SumEvenNumbers {
    public static void main(String[] args) {         int sumEven = 0, i =
2;         while (i <= 50) {             sumEven += i;
            i += 2;
        }
        System.out.println("Sum of even numbers from 1 to 50: " + sumEven);
    }
}
```

Output:

```
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
rs.java } ; if ($?) { java SumEvenNumbers }
Sum of even numbers from 1 to 50: 650
```

Sum of All Positive Integers:

```
import java.util.Scanner;

class SumPositiveNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);         int sum = 0,
input;         do {
```

```
            System.out.print("Enter a positive integer (negative to stop):
");             input = scanner.nextInt();
            if (input >= 0) {
                sum += input;
            }
        } while (input >= 0);
        System.out.println("Sum of entered positive numbers: " +
sum);          scanner.close();
    }
}
```

Output:

```
bu\Desktop\6th Semester\SCD Lab\Lab Tasks\Lab03\" ;
umbers.java } ; if ($?) { java SumPositiveNumbers }
Enter a positive integer (negative to stop): 20
Enter a positive integer (negative to stop): 1
Enter a positive integer (negative to stop): 3
Enter a positive integer (negative to stop): 8
Enter a positive integer (negative to stop): 6
Enter a positive integer (negative to stop): 5
Enter a positive integer (negative to stop): 10
Enter a positive integer (negative to stop): -1
Sum of entered positive numbers: 53
```