

22/02377

1. Write a Java program that asks the user to enter their sur name and current age then print the number of characters of their sir name and even or odd depending on their age number.

Example of Expected result:

If sir name is Saruni and age is 29, output will be;

then the number of characters is 6.

Your current age is an odd number

Import java.util.Scanner;

```
Public class SurnameAndAge {
```

```
    Public static void main(String[] args) {
```

```
        Scanner scanner = new Scanner(System.in);
```

```
        // Ask user to enter surname
```

```
        System.out.print("Enter your surname: ");
```

```
        String surname = scanner.nextLine();
```

```
        // Ask user to enter age
```

```
        System.out.print("Enter your current age: ");
```

```
        Int age = scanner.nextInt();
```

```
        // Calculate the number of characters in the surname
```

```
        Int surnameLength = surname.length();
```

```
        // Print the number of characters in the surname
```

```
        System.out.println("The number of characters in your surname is " + surnameLength + ".");
```

```
        // Check if the age is even or odd
```

```
        String evenOrOdd = (age % 2 == 0) ? "even" : "odd";
```

```
        // Print whether the age is even or odd
```

```
        System.out.println("Your current age is an " + evenOrOdd + " number.");
    }
}
```

2.

Write a program that will help kids learn divisibly test of numbers of integers. The program should check whether the given integer is divisible by integers in the range of 0-9. For example, if a number (955) is divisible by five, the program should print, the number is divisible by 5 because it ends with a 5, and 900 is divisible by 5 because it ends with a 0(zero).

```
Import java.util.Scanner;
```

```
Public class AverageMarksCalculator {
    Public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter the marks of the five units:");
        Int totalMarks = 0;

        For (int i = 1; i <= 5; i++) {
            System.out.print("Enter marks for unit " + i + ": ");
            Int marks = scanner.nextInt();
            totalMarks += marks;
        }

        Double averageMarks = (double) totalMarks / 5;

        System.out.printf("Average marks: %.2f%n", averageMarks);

        Scanner.close();
    }
}
```

4. Write a Java program to display all the multiples of 2, 3 and 7 within the range 71 to 150.

```
Def check_divisibility(number):
```

```
    Divisible_by = []
```

```
    For i in range(10):
```

```
        If number % i == 0:
```

```
            Divisible_by.append(i)
```

```
    Return divisible_by
```

```
Def main():
```

```
    Number = int(input("Enter a number: "))
```

```
    Divisible_numbers = check_divisibility(number)
```

```
    If len(divisible_numbers) > 0:
```

```
        Print("The number is divisible by:")
```

```
        For num in divisible_numbers:
```

```
            If num == 0:
```

```
                Print(f"- {number} is divisible by 10 because it ends with a 0 (zero)")
```

```
            Elif num != 1:
```

```
                Print(f"- {number} is divisible by {num} because {number} % {num} = 0")
```

```
    Else:
```

```
        Print("The number is not divisible by any integer in the range of 0-9.")
```

```
If __name__ == "__main__":
```

```
    Main()
```

3. Write a Java program to display all the multiples of 2, 3 and 7 within the range 71 to 150.

```
Public class MultiplesProgram {
```

```
    Public static void main(String[] args) {
```

```
        Int startRange = 71;
```

```
        Int endRange = 150;
```

```

        System.out.println("Multiples of 2, 3, and 7 within the range " + startRange + " to " + endRange +
        ".");
        For (int i = startRange; i <= endRange; i++) {
            If (i % 2 == 0 && i % 3 == 0 && i % 7 == 0) {
                System.out.println(i);
            }
        }
    }
}

```

5.Create a calculator using java to help user perform the basic operations (+, -, \* and /).

User should be asked to enter a number, then an operation, the program computes the operation and display the output to the computer screen.

```

import java.util.Scanner;

Public class Calculator {
    Public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the first number: ");
        Double num1 = scanner.nextDouble();

        System.out.print("Enter the operation (+, -, *, /): ");
        Char operator = scanner.next().charAt(0);

        System.out.print("Enter the second number: ");
        Double num2 = scanner.nextDouble();

        Double result = 0.0;

        Switch (operator) {
            Case '+':

```

```
        Result = num1 + num2;

        Break;
    Case '-':
        Result = num1 - num2;

        Break;
    Case '*':
        Result = num1 * num2;

        Break;
    Case '/':
        If (num2 != 0) {
            Result = num1 / num2;
        } else {
            System.out.println("Error: Division by zero is not allowed.");
            System.exit(0);
        }

        Break;
    Default:
        System.out.println("Error: Invalid operation.");
        System.exit(0);
}

System.out.println("Result: " + result);
}
}
```