

**Q1) Write a java program to reverse a String**

```
class ques1
{
    public static void main(String args[])
    {
        String s = "Chocolate";
        String ns = "";

        for(int i=0;i<s.length();i++)
        {
            ns = s.charAt(i) + ns;
        }

        System.out.println(ns);
    }
}
```



```
C:\Users\Aakash\Desktop\Strings 1>java ques1
etalocohC
```

**Q2) Write a java code to check if the string is palindrome.**

```
import java.util.Scanner;

class ques2
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter a String to check for Palindrome");
        String s = sc.nextLine();
        s = s.toLowerCase();
        String ns = "";

        for(int i=0 ; i<s.length();i++)
        {
            ns = s.charAt(i) + ns;
        }

        System.out.println("Entered String is Palindrome : " + ns.equals(s));
    }
}
```

```
C:\Users\Aakash\Desktop\Strings 1>java ques2
Enter a String to check for Palindrome
Madam
Entered String is Palindrome : true
```

**Q3) write a java program to count the number of words in a String.**

**Hint: You can use , trim() , length() and split() methods**

```
import java.util.Scanner;
class ques3
{
    static int str_words(String s)
    {
        s = s.trim(); // to remove all spaces
        String[] as = s.split(" ");

        return as.length;
    }

    public static void main(String args[])
    {
        System.out.println("Enter your String");

        Scanner sc = new Scanner(System.in);
        String s = sc.nextLine();

        System.out.println("Number of Words : " + (str_words(s)));
    }
}
```

```
C:\Users\Aakash\Desktop\Strings 1>javac ques3.java

C:\Users\Aakash\Desktop\Strings 1>java ques3
Enter your String
Hello I am Jarvis
Number of Words : 4
```

**Q4) Write an enum type TrafficLight, whose constants (RED, GREEN, YELLOW) take one parameter—the duration of the light. Write a program to test the TrafficLight enum so that it displays the enum constants and their durations.**

```

enum TrafficLight
{
    RED(20),
    GREEN(15),
    YELLOW(5);

    int duration;

    TrafficLight(int duration)
    {
        this.duration = duration;
    }
}

class ques4
{
    public static void main(String args[])
    {

        System.out.println(TrafficLight.RED + " " + TrafficLight.RED.duration);
        System.out.println(TrafficLight.GREEN + " " + TrafficLight.GREEN.duration);
        System.out.println(TrafficLight.YELLOW + " " + TrafficLight.YELLOW.duration);

    }
}

```

```

C:\Users\Aakash\Desktop\Strings 1>javac ques4.java

C:\Users\Aakash\Desktop\Strings 1>java ques4
RED 20
GREEN 15
YELLOW 5

```

**Q5 ) Develop a Java application that determines whether any of several department-store customers has exceeded the credit limit on a charge account.**

**For each customer, the following facts are available:**

- a) account number**
- b) balance at the beginning of the month**
- c) total of all items charged by the customer this month**
- d) total of all credits applied to the customer's account this month**
- e) allowed credit limit.**

**The program should input all these facts as integers, calculate the new balance (= beginning balance+ charges – credits)**

**display the new balance and determine whether the new balance exceeds the customer's credit limit. For those customers whose credit limit is exceeded, the program should display the message "Credit limit exceeded".**

```
class customer_credits
{
    int account_number =100;
    int credits_atStart;
    int charged_items;
    int credits_applied;
    int credits_allowed;

    int balance;

    customer_credits()
    {
        this.account_number = this.account_number + 1;
    }

    void balance_cal()
    {
        balance = credits_atStart + charged_items - credits_applied;

        if(balance > credits_allowed)
        {
            System.out.println("Credit Limit Exceeded");
        }
        else
        {
            System.out.println("New Balance = " + balance);
        }
    }
}
```

```

        }
    }

}

class ques5
{
    public static void main(String args[])
    {
        customer_credits cc = new customer_credits();
        cc.credits_atStart = 1000;
        cc.charged_items = 600;
        cc.credits_applied = 200;
        cc.credits_allowed = 1200;

        cc.balance_cal();

    }
}

```

```

C:\Users\Aakash\Desktop\Strings 1>javac ques5.java
C:\Users\Aakash\Desktop\Strings 1>java ques5
Credit Limit Exceeded

```