

**PROGRAMS USING WRAPPER CLASSES**

Date :

**Aim :**

To write Java Program using Wrapper Classes .

**Question 1 ) :**

Write a Java program to use Integer wrapper class for the following tasks:

- Convert a string representing a financial figure "1234" to an Integer object for further calculations.
- Parse a string "5678" representing a transaction amount to a primitive int for a calculation function.
- Compare the values of two Integer objects representing two different account balances (e.g., 10 and 20) and determine which is larger.
- For a security feature, calculate the number of one-bits in the binary representation of an account ID (e.g., 29).
- Convert an Integer representing a total transaction count (e.g., 100) to a String for a report.

**SOURCE CODE :**

```
public class Test1 {  
    public static void main(String[] args) {  
        String a = "1234";  
        Integer num1 = Integer.parseInt(a);  
        String b = "5678";  
        int num2 = Integer.parseInt(b);  
        System.out.println(num1.compareTo(num2)==-1?num2+" is Greater" :  
num1+" is Greater");  
        System.out.println("Number of One-Bits in "+num1+" is "+num1.bitCount());  
        String c = num1.toString();  
        System.out.println(c);  
    }  
}
```

## **OUTPUT :**

```
PS C:\ALL CODINGS\Java> cd "c:\ALL CODINGS\Java\" ; if ($?) { javac Test1.java } ; if ($?) { java Test1 }
5678 is Greater
Number of One-Bits in 1234 is -46
1234
PS C:\ALL CODINGS\Java>
```

## **Question 2 ) :**

Write a Java program to use Character wrapper class for the following tasks: a. Verify if a given character (e.g., 'a') from user input is a letter, ensuring that only alphabetic characters are used in certain fields.

b. Check if a given character (e.g., '1') from a numeric input field is a digit.

c. Convert a lowercase character (e.g., 'b') to uppercase for standardized display, and vice versa (e.g., 'G' to lowercase).

d. Check if a given character (e.g., ' ') in user input is a whitespace, to validate proper word spacing in text fields.

## **SOURCE CODE :**

```
import java.util.Scanner;

public class Test1 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter a Character :");

        char ch1 = sc.next().charAt(0);

        System.out.println("Is the Character is Alphabet :

        "+Character.isLetter(ch1)); System.out.println("Enter a Character :"); char

        ch2 = sc.next().charAt(0);

        System.out.println("Is the Character is Digit :

        "+Character.isDigit(ch2)); System.out.println("Enter a Character :");

        char ch3 = sc.next().charAt(0);

        if(Character.isLowerCase(ch3)){

            System.out.println("UpperCase of "+ch3+" is "+Character.toUpperCase(ch3));

        }

        else{

            System.out.println("LowerCase of "+ch3+" is

            "+Character.toLowerCase(ch3));

        }

    }

}
```

```
char ch4 = ' ';  
  
System.out.println("Is the Given Character is Space :  
"+Character.isWhitespace(ch4));  
  
}  
  
}
```

### **OUTPUT :**

```
PS C:\ALL CODINGS\Java> cd "c:\ALL CODINGS\Java\" ; if ($?) { javac Test1.java } ; if ($?) { java Test1 }  
Enter a Character :  
4  
Is the Character is Alphabet : false  
Enter a Character :  
f  
Is the Character is Digit : false  
Enter a Character :  
S  
LowerCase of S is s  
Is the Given Character is Space : true  
PS C:\ALL CODINGS\Java> █
```

### **RESULT :**

Thus the Program using Wrapper Classes has been executed Successfully and Output is verified .