Daily Work Practice:- Date – 4/9/2023

Program:- Maximum value of string in array

```
package com.ishwarchavan;

 public class MaxElementArray {     //class is created
       public static void main(String[] args) {    //main program is started

              String[] strs = {"alic3","bob","3","4","0000000000"};;
             System.out.println(maximumValue(strs));  //function calling
      }

    public static int maximumValue(String[] strs) {   //function is created
        int maximum = 0;

        for(int i = 0; i < strs.length; i++)   //loops is created
        {
            boolean value = false;
            int j = 0;       //initializing value
            String word = strs[i];

            while (j < word.length())    //condition is checking
            {
                int letter = word.charAt(j);
                if (letter > 96 && letter < 123)   //if condition is true then
initialize the true value
                {
                    value = true;
                    break;       //break the loops
                }
                j += 1;     //increment with 1
            }
            if (value == true)   //if this is true
            {
                if (word.length() > maximum)  //checking the condition if true
                {
                    maximum = word.length();
                }
            }
            else
            {
                int number = Integer.parseInt(word);   //if false then checking this
conditionn
                if (number > maximum)
                {
                    maximum = number;   //initialize the value
                }
            }
        }

            return maximum;     //return the maximum value
    }
}
```

Program:- Distinct of prime factors of product of array

```
package com.ishwarchavan;
import java.util.HashSet;
import java.util.Set;

public class DistinctPrimeFacOfProduct {     //class is created

    public static int distinctPrimeFactors(int[] nums) {    //function is created
        Set<Integer> primeFactors = new HashSet<>();     //prime factors object is
created
        for (int num : nums) {

            int i = 2;    //initializing and declaring variable

            while (num > 1) {      //if true then executed if...else statement
                if (num % i == 0) {
                    primeFactors.add(i);   //adding value
                    num =num / i;
                } else {
                    i++;    //increment the value
                }
            }
        }
        return primeFactors.size();      //return the prime size value

    }

public static void main(String[] args) {   //main program is started
      int nums[]= {2,4,3,7,10,6,12,14,10,16,12};    //nums arrays created
      System.out.println(distinctPrimeFactors(nums));     //calling and printing the
value
}
}
```