IMPLEMENTATION OF VECTORS

Assignment – 4 | SEM – 2

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1. WAP to accept students name from command line and store them in vector.

CODE

```java
import java.util.*;

class StudentNames
{
    public static void main(String[] args)
    {
        Vector<String> names = new Vector<String>();
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter no of students");
        int n = sc.nextInt();
        System.out.println("Enter names of students");
        for(int i=0; i<n; i++)
        {
            names.add(sc.next());
        }
        System.out.println("Printing names of students");
        for(int i=0; i<n; i++)
        {
            System.out.println(names.get(i)+" ");
        }
    }
}
```

OUTPUT

```
C:\Users\ayush\Desktop\JAVA_assignment>java StudentNames
Enter no of students
3
Enter names of students
Ayush Anish Dhruv
Printing names of students
Ayush
Anish
Dhruv
```

2. WAP to add n strings in a vector array. Input new string and check if it is present in the vector. If present delete it else add to the vector

```java
import java.util.*;

class VectorStrings
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        Vector<String> vec = new Vector<String>();
        int n;
        System.out.println("Enter the number of strings: ");
        n = sc.nextInt();
        System.out.println("Enter the string elements of vector: ");
        for(int i=0; i<=n; i++)
        {
            vec.add(sc.nextLine());
        }
        System.out.print("Enter new string: ");
        String newStr = sc.nextLine();
        if (vec.contains(newStr))
        {
            vec.remove(newStr);
            System.out.print(newStr+" is removed");
            System.out.print(vec);
        }
        else
        {
            vec.add(newStr);
            System.out.print(newStr+" is added");
            System.out.print(vec);
        }
    }
}
```

OUTPUT

```
c is added[, a, b, c]
C:\Users\ayush\Desktop\JAVA_assignment>javac VectorStrings.java

C:\Users\ayush\Desktop\JAVA_assignment>java VectorStrings
Enter the number of strings:
3
Enter the string elements of vector:
a
b
c
Enter new string: d
d is added[, a, b, c, d]
C:\Users\ayush\Desktop\JAVA_assignment>javac VectorStrings.java

C:\Users\ayush\Desktop\JAVA_assignment>java VectorStrings
Enter the number of strings:
3
Enter the string elements of vector:
a
b
c
Enter new string: c
c is removed[, a, b]
```