**Practical no.-**14

**Title:**Write a program for implementation of Vectors in Java

**Roll No.:** 05 **Batch-** A **Date of Performance:** 12-March-2023

**Code:-**

import java.util.\*;

public class Vectorpr

{

public static void main(String args[])

{

Vector<String> vec = new Vector<String>(4);

vec.add("Tiger");

vec.add("Lion");

vec.add("Dog");

vec.add("Elephant");

System.out.println("Size of vector is: "+vec.size());

System.out.println("Default capacity of vector is: "+vec.capacity());

System.out.println("Vector element is: "+vec);

vec.addElement("Rat");

vec.addElement("Cat");

vec.addElement("Deer");

System.out.println("Size of vector after adding new element: "+vec.size());

System.out.println("Capacity after adding new element is: "+vec.capacity());

System.out.println("Vectors elements are: "+vec);

if(vec.contains("Lion"))

{

System.out.println("Lion is present at the index " +vec.indexOf("Lion"));

}

else

{

System.out.println("Lion is not present in the list.");

}

System.out.println("The first animal of the vector is = "+vec.firstElement());

System.out.println("The last animal of the vector is = "+vec.lastElement());

}

}

**Output-**

Microsoft Windows [Version 10.0.21996.1]

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C:\Users\Test>D:

D:\>cd D:\Java\jdk-19\bin\SYCM-1\_15

D:\Java\jdk-19\bin\SYCM-1\_15>set path=D:\Java\jdk-19\bin

D:\Java\jdk-19\bin\SYCM-1\_15>javac Vectorpr.java

D:\Java\jdk-19\bin\SYCM-1\_15>java Vectorpr

Size of vector is: 4

Default capacity of vector is: 4

Vector element is: [Tiger, Lion, Dog, Elephant]

Size of vector after adding new element: 7

Capacity after adding new element is: 8

Vectors elements are: [Tiger, Lion, Dog, Elephant, Rat, Cat, Deer]

Lion is present at the index 1

The first animal of the vector is = Tiger

The last animal of the vector is = Deer