

PROGRAM CODE:

```
import java.util.*;

class insertion_sort
{
    public static void main(String[] args)
    {
        System.out.println("Consider ACE=1, JACK=11, QUEEN=12, KING=13");
        System.out.println("Enter the size of deck(array) ::");
        Scanner s1=new Scanner(System.in);
        int x=s1.nextInt();

        System.out.println("Enter the card numbers::");
        Scanner s= new Scanner(System.in);
        int[] a=new int[x];
        for(int i=0;i<x;i++)
        {
            a[i]=s.nextInt();
        }

        int i,j;
        int temp;
        for(i=1;i<x;i++)
        {
            temp=a[i];
            for(j=i-1;j>=0 && a[j]>temp;j--)
            {
                a[j+1]=a[j];
            }
            a[j+1]=temp;
        }
    }
}
```

```
        System.out.println("After Sorting cards are::");  
        for(i=0;i<x;i++)  
        {  
            System.out.println(a[i]);  
        }  
    }  
}
```

OUTPUT:

```
C:\Users\kashy\OneDrive\Desktop>javac new.java  
  
C:\Users\kashy\OneDrive\Desktop>java insertion_sort  
Consider ACE=1, JACK=11, QUEEN=12, KING=13  
Enter the size of deck(array) ::  
5  
Enter the card numbers::  
  
1  
2  
3  
4  
5  
After Sorting cards are::  
1  
2  
3  
4  
5
```