Assignment NO-07.

Ref. No.: 63

Date : / /

Title :

Implement a generic program using any collection class to count the number of elements in a collection that have a specific property such as even numbers, odd number, prime number and polindromes.

Theory :

Generics in Java:

The Java Generics programming is introduced in J2SE 5 to deal with type-safe objects. It makes the the code stable by detecting the bugs at compile time.

Before generics, we can store any type of objects in the collection. i.e non-generic. Now generics force the java programmer to store a specifiti type of objects.

Advantage

1) Type-Safety.
We can hold only a single type of object in generics. It doesnot allow to store other objects.

2) Type casting is not required.

3) Compile-Time Checking.
It is checked at compile time so problem

will not occur at ~~time~~ runtime. The good programming strategy says it is far better to handle the problem at compile time than runtime.

Example.

```
import java.util.*;
class TestGenerics1 {
public static void main (String args[]){
ArrayList<String> list = new ArrayList<String>();
list.add ("rahul");
list.add ("jai");
String s = list.get(1);
System.out.println ("element is:" +s);
Iterator<String> itr = list.iterator();
while (itr.hasNext()){
System.out.println (itr.next());
}
}
}
```

Conclusion :

Hence, we have successfully implement a generic program using any collection class.