Week 10

1BM19CS031
Rajeshwari

Lab program 7

```
import java.util.Scanner;
class Generic<A,B,C>{
    A ob1;
    B ob2;
    C ob3;
    Generic(A o1, B o2, C o3){
        ob1=o1;
        ob2=o2;
        ob3=o3;
    }
    void print(){
    System.out.println("Type of A is:"+ob1.getclass().getName());
System.out.println("Type of B is:"+ob2.getclass().getName());
System.out.println("Type of C is:"+ob3.getclass().getName());
    }
    A get1(){
     return ob1;
    }
    B get2(){
    return ob2;
    }
    C get3(){
     return ob3;
    }
}
class GenericMain{
    Public static void main(String args[]){
    Scanner ss=new Scanner(System.in);
    System.out.println("Enter a character:");
     char c=ss.next().charAt(0);
Generic<character, Boolean, String> ob=new Generic<chara
    cter, Boolean, String>(c, true, "yes");
    ob.print();
```

```
char x = ob.get1();
System.out.println("value : "+x);
boolean y = ob.get2();
System.out.println("value : "+y);
String s = ob.get3();
System.out.println("value : "+s);
}
}
```

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Lab 8

```
import java.util.Scanner;
class WrongAge extends Exception{
 int age;
WrongAge (int x){
 age = x;
}
public String toString(){
return "Age entered is incorrect";
 }
}
class father{
int a;
father (int x){
 a = x;
}}
class son extends father{
 int age;
son (int fage, int sage){
super(fage);
age = sage;
 }
void check() throws WrongAge {
if (age >= a || age < 0 || a < 0){
throw new WrongAge (age);
}
else {
System.out.println("Correct ages entered");
System.out.println("Fathers age: " + a + "\n" + "Sons age: "
                                                + age);
  }}
}
class ExceptionsMain{
    public static void main (String args[]) {
```

```
Scanner sc = new Scanner(System.in);
System.out.println("Enter father's age:");
int f = sc.nextInt();
System.out.println("Enter Son's age:");
int s = sc.nextInt();
Son ss = new Son(f, s);
try {
    ss.check();
}
catch(WrongAge e) {
System.out.println(""+e);
    }
}
}
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19041.630]
(c) 2020 Microsoft Corporation. All rights reserved.

J:\Rajeshwari\JAVA\Week10>javac GenericMain.java

J:\Rajeshwari\JAVA\Week10>java  GenericMain
Enter a character:
a 10 hello
The type of A is:java.lang.Character
The type of B is:java.lang.Boolean
The type of C is:java.lang.String
value: a
value: true
value: yes

J:\Rajeshwari\JAVA\Week10>javac ExceptionsMain.java

J:\Rajeshwari\JAVA\Week10>java  ExceptionsMain
Enter father's age:
40
Enter son's age:
40
 Age entered is incorrect

J:\Rajeshwari\JAVA\Week10>java  ExceptionsMain
Enter father's age:
50
Enter son's age:
30
Correct ages entered
Father's age:50
Son's age:30

J:\Rajeshwari\JAVA\Week10>java  ExceptionsMain
Enter father's age:
45
Enter son's age:
50
 Age entered is incorrect

J:\Rajeshwari\JAVA\Week10>
```