# EXERCISE – 8

**(Exception Handling)**

**8. Define a class to maintain bank accounts of customers. The program should place the code into a try-catch block with multiple catches to check for the validity of various attributes based on the following criteria.**

1. **Customer ID must start with a letter and should be followed by three digits.**
2. **Account number must be of five digits.**
3. **Initial balance must be above $1000.**

**Print suitable error matches within the catch block. If any of the criteria mentioned above is not fulfilled, the program should loop back and let the user enter new data.**

**Aim:** To implement java program for Exception Handling.

**Proram:**

import java.util.\*;

class AccountDetails

{

private String customerID;

private int accountNumber;

private double initBalance;

void readAccountDetails()

{

Scanner s = new Scanner(System.in);

while(true)

{

try {

System.out.println("Enter CustomerId:");

customerID = s.next();

if (!(Character.isLetter(customerID.charAt(0)) &&Character.isDigit(customerID.charAt(1)) &&Character.isDigit(customerID.charAt(2))

&&Character.isDigit(customerID.charAt(3))))

throw new Exception("Customer ID must start with a letter and should be followed by three digits");

}

catch(Exception e) {

System.out.println(e);continue;}

try {

System.out.println("Enter accountNumber:");

accountNumber = s.nextInt();

if (String.valueOf(accountNumber).length() != 5)

throw new Exception("Account no must be of five digits");

}

catch(Exception e) {

System.out.println(e);

continue;

}

try{

System.out.println("Enter InitialBalance:");

initBalance=s.nextDouble();

if (initBalance<= 1000)

throw new Exception("Initial balance must be above $1000");

break;

}

catch(Exception e) {System.out.println(e);}

}

}

void displayAccountDetails()

{

System.out.println("\*\*\* ACCOUNT\_DETAILS \*\*\*");

System.out.println("CUSTOMER ID :"+customerID+"\nACCOUNT\_NUMBER :"+accountNumber+"\nINITIAL BALANCE :"+initBalance);

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

}

public class ExceptionHandling

{

public static void main(String[] args)

{

AccountDetails ad= new AccountDetails();

ad.readAccountDetails();

ad.displayAccountDetails();

}

}

**Output 1:**

Enter CustomerId:

C101

Enter accountNumber:

32143

Enter InitialBalance:

4000

\*\*\* ACCOUNT\_DETAILS \*\*\*

CUSTOMER ID :C101

ACCOUNT\_NUMBER :32143

INITIAL BALANCE :4000.0

\*\*\*\*\*\*\*\*\*\*\*\*\*

=== Code Execution Successful ===

**Output 2:**

Enter CustomerId:

101

java.lang.Exception: Customer ID must start with a letter and should be followed by three digits

Enter CustomerId:

C101

Enter accountNumber:

234

java.lang.Exception: Account no must be of five digits

Enter CustomerId:

C101

Enter accountNumber:

21345

Enter InitialBalance:

500

java.lang.Exception: Initial balance must be above $1000

Enter CustomerId:

C101

Enter accountNumber:

21345

Enter InitialBalance:

2000

\*\*\* ACCOUNT\_DETAILS \*\*\*

CUSTOMER ID :C101

ACCOUNT\_NUMBER :21345

INITIAL BALANCE :2000.0

\*\*\*\*\*\*\*\*\*\*\*\*\*

=== Code Execution Successful ===