7.6 Throwing our own Exception

You can create your own exceptions in Java. Keep the following points in mind when writing your own exception classes:

➤ All exceptions must be a child of Throwable.

➤ If you want to write a checked exception that is automatically enforced by the Handle or Declare Rule, you need to extend the Exception class.

➤ If you want to write a runtime exception, you need to extend the RuntimeException class.

We can define our own Exception class as below:

```
class MyException extends Exception
{
}
```

➤ You just need to extend the predefined Exception class to create your own Exception.

➤ These are considered to be checked exceptions.

➤ The following InsufficientFundsException class is a user-defined exception that extends the Exception class, making it a checked exception.

➤ An exception class is like any other class, containing useful fields and methods.

Example:

The following BankDemo program demonstrates invoking the deposit() and withdraw() methods of CheckingAccount.

```
// File Name BankDemo.java
public class BankDemo
```

```java
{
public static void main(String [] args){
CheckingAccount c = new CheckingAccount(101);
System.out.println("Depositing $500...");
c.deposit(500.00);
try
{
System.out.println("\nWithdrawing $100...");
c.withdraw(100.00);
System.out.println("\nWithdrawing $600...");
c.withdraw(600.00);
}
catch(InsufficientFundsException e)
{
System.out.println("Sorry, but you are short $" + e.getAmount());
e.printStackTrace();
}
}
}
```