Exceptions

1.

Types of Exception

* ClassNotFoundException
* InterruptedException
* IOException
* InstantiationException
* SQLException
* FileNotFoundException
* ArithmeticException
* NullPointerException
* ArrayIndexOutOfBoundException
* ArrayStoreException

Ways to handle Exception

* Throwing Exceptions – by using the **throw** keyword and creating a new Exception or re-throwing an already created exception.
* Try-Catch Block – the code that throw exception is put into **try** block and the code that should handle the exception is in the **catch** block.
* Finally Block – last part of **try-catch** block which always gets executed, either after try or catch
* Try with Resources Block – This block will automatically close the resource used. i.e. open the resources needed in the try block and ‘try with resource’ block will close it for you.

2.

Exceptions can be thrown by constructors. They can be thrown automatically by Java if you try to pass invalid data into the constructor. They can also be explicitly thrown in your code if you want more customized exception handling.

public class Student{

private String name;

private int age;

public Student(string name, int age) throws IllegalArgumetException{

if(age<0){

throw new IllegalArgumentException(“Age must be greater than 0”);

}

name=name;

age=age;

}

}