### Name of the Teacher – Vaishali C. Dalvi Class – B.Sc (CS) Entire Subject – C# Programming

# Exception Handling In C#

## **Types of Errors**

 Syntax Error – Syntax errors are those that appear while you write code. C# checks code while typing it in the code editor window and alerts if any mistake is made. Syntax errors are most common type of errors. They can be fixed easily in the coding environment as soon as they occur.

#### Run Time Error – are those that appear only after you compile and run your code. These invokes code that may appear to be correct in that it has no syntax errors but that will not execute

• E.g. code has been written to open a file, but if file is corrupted the application can not open file. And it stops running.

#### Logical Errors – are those that appear once the application is in use. They are most often unwanted or unexpected results in response to user action. Logical errors are generally hardest type to fix since it is not always clear when they originate.

### What is Exception Handling?

- An exception is defined as an event that occurs during the execution of a program that is unexpected by the program code.
- The actions to be performed in case of occurrence of an exception is not known to the program. In such a case, we can create an exception object and call the exception handler code.
- Exceptions can be generated by the common language runtime (CLR), by .NET or third-party libraries, or by application code. Exceptions are created by using the throw keyword.

- Exceptions in the application must be handled to prevent crashing of the program and unexpected result.
- The C# language's exception handling features help you deal with any unexpected or exceptional situations that occur when a program is running.
- When exception occurs it must be handled and continue with other functionalities. C# provides built-in support to handle the exception using try, catch & finally blocks.



