

DAY 12 ASSIGNMENT

-- BY SARATH KASIMSETTY

1) What is Exception Handling and why we need exception handling.

- Exception handling is process to handle runtime errors.
- Exception handling is done to ensure that our application will not crash.
- Exception Handling will not display any technical details, to make sure we handle errors gracefully and display friendly messages.

2) Write a simple division program and handle three exceptions discussed in the class., also add super exception at the last.

CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
//SARATH KASIMSETTY
//Write a simple division program and handle three exceptions discussed in the
//class., also add super exception at the last.

namespace Day12Project2
{
    /// <summary>
    /// Exception handling
    /// </summary>
    internal class Program
    {
        static void Main(string[] args)
        {
            try
            {
                string[] data = new string[5];
                data[4] = "sarath";
            }
        }
    }
}
```

OUTPUT:

```
Enter First Number :  
10  
Enter Second Number :  
5  
Answer of adding = 15  
Answer of division = 2
```

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RUNTIME ERROR:

```
Enter First Number :  
10000000000000000000  
Only numbers are between 0 to 500000
```

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4) What is the use of "finally" block illustrate with an example.

- By using a finally block, you can clean up any resources that are allocated in a try block.
- The finally block in c# is used to put important codes such as clean up code.
- the finally block will be executed even after a return statement in a method

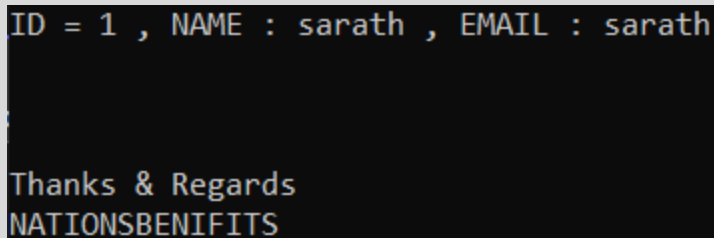
EXAMPLE CODE:

```
static void Main(string[] args)
{
    try
    {
        int id = 1;
        string name = "sarath", email = "sarathkasimsetty18@gmail.com";

        Console.WriteLine("ID = {0} , NAME : {1} , EMAIL : {1}", id, name,
email);
    }
    finally
    {
        Console.WriteLine("\n\nThanks & Regards");
        Console.WriteLine("NATIONSBENIFITS");

        Console.ReadLine();
    }
}
```

OUTPUT:



```
ID = 1 , NAME : sarath , EMAIL : sarath
.
Thanks & Regards
NATIONSBENIFITS
```

5) What are the points about Exception Handling discussed in the class ?

- Exception Handling is done to Handle errors gracefully.
- Single try block can have multiple catch blocks
- General Exception block should be implemented at the end of all exceptional catch blocks.

- Statements written in Finally Block are Executed irrespective of Exceptions.
- General Syntax for Exception Handling is : **TRY > CATCH>FINALLY.**

6) What is compilation and Runtime error .Write atleast 3 differences between them compilation and runtime error.

| Complication Error | Runtime Error |
|--|---|
| <ol style="list-style-type: none">1. This Error generally refers to the errors corresponding to the semantics or syntax.2. Most Compilation Errors are of Developer Mistakes.3. These Type of Errors, can easily identify and can be resolved easily.4. Compilers can easily detect compile-time errors during the development of code. | <ol style="list-style-type: none">1. A runtime error refers to the error that we encounter during the code execution during runtime.2. Most Runtime Errors are of Logical Errors.3. These Errors are Hard to Identify and resolve them.4. A compiler cannot easily detect a runtime error. Thus, we need to identify it during the execution of code |

