

* Namespace :- In C++, namespace are used to organise too many classes so that it can be easy to handle the application. For accessing the class of a namespace, we need to use namespace name, class name.

We can use it using keywords so that we don't have to use complete name all the time.

Example of namespace -

```
namespace first()
{
    void sayhello()
    {
        cout << "Hello first namespace" << endl;
    }
}

namespace second()
{
    void sayhello()
    {
        cout << "Hello second namespace" << endl;
    }
}

void main()
{
    first::sayhello();
    second::sayhello();
    getch();
}
```

Output - Hello first namespace
Hello second namespace

* Exception handling - Exception handling in C++ is a process to handle run time errors. We perform exception handling ~~to~~^{so} the normal flow of the application can be maintained even after errors.

All the exception classes in C++ are derived from `std::exception` class. Let's see the list of C++ common exception classes.

1. Logic failure - It is an exception that can be detected by reading a code.
2. Runtime error - It is an exception that cannot be detected by reading a code.
3. Bad exception - It is used to handle the unexpected exception in C++ program.

• C++ exception handling keywords - In C++ we use 3 keywords to perform exception handling.

- 1- `try`
- 2- `catch`
- 3- `throw`

C++ try / catch - Exception handling is performed using try / catch statement. The C++ try block is used to place the code

that may occur exception. The catch block is used to handle the exceptions
Ex- try / catch / block

try[] block - This block captures series of errors in any program at runtime and throw it to the catch block where user can customize the error message.

```
try
{
}
}
```

Catch[] block - This block catches the errors thrown by try block. This block contains method to customize error.

Syntax -

```
catch
{
}
}
```

throw function - This function is used to transfer the error from try block to catch block. This function plays major role to save program from crashing.