Agenda

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Exception handling
Operator Overloading
Constant Object
Association
Inheritance
```

Exception Handling (demo01.cpp to demo03.cpp)

```
- to seperate the BL from Error handling logic
1. try
    - it is block inside which we are going to call the functions which are going
to throw the error.
    - every try block must have atleast one catch block
2. catch
    - this block is going to handle the thrown error.
    - catch block is always kept after the try block.
    - we can write multiple catch blocks depending on type of error thrown
    - if we want to handle all types of errors ins a single catch block then we
can write a generic catch block.
3. throw
    - this is used to genereate an error.
    - by using throw we can generate error of all types(int,float double,etc..)
```

Operator Overloading (demo04.cpp & demo05.cpp)

```
- If you want to perform some operations on user defined objects with the help of
operators then you need to overload them
- Few Operators can be overloaded as a member functions and as a non member
function as well.
- Some operators can be only overloaded using member functions only.
- Few operators cannot be overloaded.
```

Constant object (demo06.cpp)

Hirerachy(Association) (demo07.cpp)

```
-If the relation between two entities(objects) is of type has-a, then we say it is
association
- if the two entities are tightly coupled we call them as composition
- if the two entities are loosely coupled we call them as aggegration
```

Inheritance (demo08.cpp)

```
-If the relation between two entities(objects) is of type is-a, then we say it is
inheritance
- If you want to access your data members inside your child class but not outside
the class in non member functions then make such data members as protected.
- Their are 5 types of inheritance
    1. Single
    2. Multiple
    3. Multilevel
    4. Hirerachical
    5. Hybrid
```