Q-01: What is copy constructor? Explain with example.

Sol:

A copy constructor is a constructor that is used to copy or initialize the value of one object into another object is called copy constructor.

Example:

```
#include<iostream>
using namespace std;
class base{
    int a, b;
public:
    base(int a1, int b1){
        a = a1;
        b = b1;
    }
    base(base &obj){
        a = obj.a;
        b = obj.b;
    }
```

P.t.o

```
void show(){
        cout<<a<<" "<<b<<endl;
}
int main(){
        base obj1(10, 20);
        base obj2(obj1); // copy constructor.
        obj2.show();
}
```

Q-02: Why we use exception handling? How would you handle exceptions for a division error? Explain with the sample code.

Sol:

Exception handling in c++ is a process to handle runtime errors. We perform exception handling so the normal flow of the application can be maintained even after runtime errors.

In c++, exception is an event or object which is thrown at runtime. All exception are derived from std:: exception class. It is runtime error which can be handled. If we don't handle the exception, it prints exception message and terminates the program.

In cpp there is 3 keyword to person exception handling.

i) try.

ii) catch and

iii) throw

P.t.o

```
#include<iostream>
using namespace std;
int main(){
  try{
    int a, b;
    cin>>a>>b;
    if(b==0){
        throw -1;
    }
    double ans = (double)a/b;
    cout<<ans<<endl;
  }
catch(int x){
  cout<<"Divided by zero is not possible"<<endl;
}
}
```