Exception handling

```
#include <iostream>
using namespace std;
/* run this program using the console pauser or add your own getch, system("pause") or input loop
*/
#include"calculator.h"
int main(int argc, char** argv) {
	calculator c;
	int a,b;
	while(1){

		cout<<"1.+";
		cout<<"2.-";
		cout<<"3.*";
		cout<<"4.%";
		cout<<"5./";

		char sign;
		cout<<"Enter the operation wants to perform";
		cin>>sign;
		cout<<sign;
		int a='+'==sign;
		cout<<a;
		try{
					if(sign!='+'&& sign!='-'&& sign!='*' && sign!='/' &&
sign!='%'){
			throw "Please enter the valid sign\n";
		}
		switch(sign){
			case '+':{
				int a,b;
				cout<<"Enter the a";
```

```
                cin>>a;
                cout<<"Enter the b:";
                cin>>b;
                        //if a n b invalid
                        try{
                                if(a<0 && b<0){
                                        throw "Invalid
number";
                                }
                                cout<<c.add(a,b);
                        }
                        catch(const char* e){
                                cout<<e;
                        }
                break;
        }
        case '-':{
                int a,b;
                cout<<"Enter the a";
                cin>>a;
                cout<<"Enter the b:";
                cin>>b;
                        //if a n b invalid
                        try{
                                if(a<0 && b<0){
                                        throw "Invalid
number";
                                }
                                cout<<c.sub(a,b);
                        }
                        catch(const char* e){
                                cout<<e;
```

```
                }
            break;
        }
        case '*':{
            int a,b;
            cout<<"Enter the a";
            cin>>a;
            cout<<"Enter the b:";
            cin>>b;
                //if a n b invalid
                try{
                    if(a<0 && b<0){
                        throw "Invalid
number";
                    }
                    cout<<c.mul(a,b);
                }
                catch(const char* e){
                    cout<<e;
                }

            break;
        }
        case '/':{
            int a,b;
            cout<<"Enter the a";
            cin>>a;
            cout<<"Enter the b:";
            cin>>b;
                //if a n b invalid
                try{
```

```
                                        if(b==0){
                                                throw "Invalid
number";
                                        }
                                        cout<<c.div(a,b);
                                }
                                catch(const char* e){
                                        cout<<e;
                                }
                        break;
                }
                case '%':{
                        int a,b;
                        cout<<"Enter the a";
                        cin>>a;
                        cout<<"Enter the b:";
                        cin>>b;
                                //if a n b invalid
                                try{
                                        if(a<0 && b<0){
                                                throw "Invalid
number";
                                        }
                                        cout<<c.mod(a,b);
                                }
                                catch(const char* e){
                                        cout<<e;
                                }
                        break;
                }

        }//switch ends here
```

```
                                        //if switch gets execute then break the loop here
                                        break;
                        }
                        catch(const char* c){
                                cout<<c;
                        }

        }
        return 0;
}
//header file
#include<iostream>
using namespace std;
class calculator{
        public:
        int add(int,int);
        int sub(int ,int);
        int mul(int,int);
        int div(int,int);
        int mod(int,int);
};
//defination
#include"calculator.h"
int calculator::add(int a ,int b){

        return a+b;
}
int calculator::sub(int a ,int b){
        return a-b;
}
```

```
int calculator::mul(int a,int b){
	return a*b;
}
int calculator::div(int a,int b){
	return a/b;

}
int calculator::mod(int a,int b){
	return a%b;
}
#include <iostream>
#include"television.h"
/* run this program using the console pauser or add your own getch, system("pause") or input loop
*/

int main(int argc, char** argv) {

		Television t;
		t.store();
	try{

		if(t.getModelNum()>9999)//max 4 digit 9999
		{
			throw "model num is more than 4 digit";
		}
		if(t.getSize()<12 || t.getSize()>70){
			throw "Invalid size";
		}
		if(t.getPrice()<0 || t.getPrice()>50000){
			throw "price is negative or greater then 50000";
		}
```

```
                t.display();
        }catch(const char* e){

                cout<<e;
                //jar throw zal tar zero ni initialize karych throw zalya vr control yeto catch block
madhe
                //so ethe zero all values set karyche
                t.setModelNum(0);
                t.setSize(0);
                t.setPrice(0);
                t.display();
        }
        return 0;
}
#include<iostream>
using namespace std;
class Television{
        int modelNum;
        int size;
        double price;

        public:
        Television();
        Television(int,int,double);
        void setModelNum(int);
        void setSize(int);
        void setPrice(double);

        int getModelNum();
```

```
        int getSize();
        double getPrice();

        void store();

        void display();
};
//definations
#include "television.h"
Television::Television(){
        this->modelNum=0;
        this->size=0;
        this->price=0;
}
Television::Television(int n,int s,double p){
        this->modelNum=n;
        this->size=s;
        this->price=p;
}
void Television::setModelNum(int n){
        this->modelNum=n;
}
void Television::setSize(int s){
        this->size=s;
}
void Television::setPrice(double p){
        this->price=p;
}

int Television::getModelNum(){
        return this->modelNum;
```

```
}
int Television::getSize(){
	return this->size;
}
double Television::getPrice(){
	return this->price;
}

void Television::store(){
	int modelnum,size;
	double price;
	cout<<"Enter the model number:";
	cin>>modelnum;
	this->modelNum=modelnum;
	cout<<"Enter the size:";
	cin>>size;
	this->size=size;
	cout<<"Enter the price:";
	cin>>price;
	this->price=price;
}

void Television::display(){
	cout<<"\nTelevison\n";
	cout<<this->modelNum<<"\n";
	cout<<this->size<<"\n";
	cout<<this->price<<"\n";
}
```