**Lab-8 Assignment**

**1)C++ program to print the marks using try block**

**Algorithm:** In this program we are first declaring array of 5 students marks and then read the marks. We are assigning the values to a variable named ‘tm’. We are using try statement to test whether the mark of student is above 65 or not. If it is above 65, the marks will be printed, or it will throw the exception then the catch block will show the output of student got marks less than 65.

**Logic:**

#include <iostream>

using namespace std;

int main()

{

int m[5];

cout<<"Enter the marks of the students : "<<endl;

for(int i=0;i<5;i++){

cin>>m[i];

}

for(int i=0;i<5;i++)

{

int tm=m[i];

try

{

if(tm>=65)

cout<<"The mark of the student is : "<<tm<<endl;

else

throw tm;

}

catch(int tm)

{

cout<<"The mark of the student is less than 65"<<endl;

}

}

cout<<"Submitted by G.Hruthesh Reddy,Admn.No 20BCB7031"<<endl;

}

**Output:**

**Text

Description automatically generated**

**2)C++ program to get the output using throw-catch block**

**Algorithm:** In this program we are declaring z for storing integer and s for storing character. The user will select what to write and then we are using try block to get the output. If user is selecting option 1 to write a number, then it will throw an exception and catches by the catch block and prints the output and same is applies for the string. In string user will select option 2 to store the sting variable.

**Logic:**

#include<iostream>

using namespace std;

int main()

{

int z;

string s;

int n;

cout<<"Enter 1 to write number"<<endl;

cout<<"Enter 2 to write a word"<<endl;

cout<<"Select an option : ";

cin>>n;

try

{

if(n==1){

cout<<"Enter a number : ";

cin>>z;

throw z;

}

else if(n==2){

cout<<"Enter a word : ";

cin>>s;

throw s;

}

else{

cout<<"Select the correct option"<<endl;

}

}

catch(int z)

{

cout<<"Your number is "<<z<<endl;

}

catch(string s)

{

cout<<"Your word is "<<s<<endl;

}

cout<<"Submitted by G.Hruthesh Reddy, Admn.No 20BCB7031"<<endl;

}

**Output:**

**A screenshot of a computer

Description automatically generated**

**A screenshot of a computer

Description automatically generated**

**3)C++ program to get salary of shopkeeper using try block**

**Algorithm:** At first, we are declaring the array of income of 5 days. Then we are reading it. Using for loop we are calculating the total income by adding. Using try block we are deciding whether the income is above 50000 or not. If it is less than 50000 then it will throw an exception, which will get to the catch print the result. Then we are declaring another try block for average. In that if average is less than 7500 it will throw an exception.

**Logic:**

#include <iostream>

using namespace std;

int main()

{

int d[5];

cout<<"Enter the Income of the shopkeeper daywise : "<<endl;

for(int i=0;i<5;i++){

cin>>d[i];

}

int tm=0;

try

{

for(int i=0;i<5;i++){

tm +=d[i];

}

if(tm<50000){

throw tm;

}

else{

cout<<"The Total income of five days : "<<tm<<endl;

}

}

catch(int tm)

{

cout<<"The Total income of the shopkeeper is less than 50000"<<endl;

}

try

{

int avg=tm/5;

if(avg<7500){

throw avg;

}

else{

cout<<"The Average income of five days : "<<avg<<endl;

}

}

catch(int avg)

{

cout<<"The Average income of the shopkeeper is less than 7500"<<endl;

}

cout<<"Submitted by G.Hruthesh Reddy,Admn.No 20BCB7031"<<endl;

}

**Output:**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated**

**Time of Submission:** 29-9-21,17:40