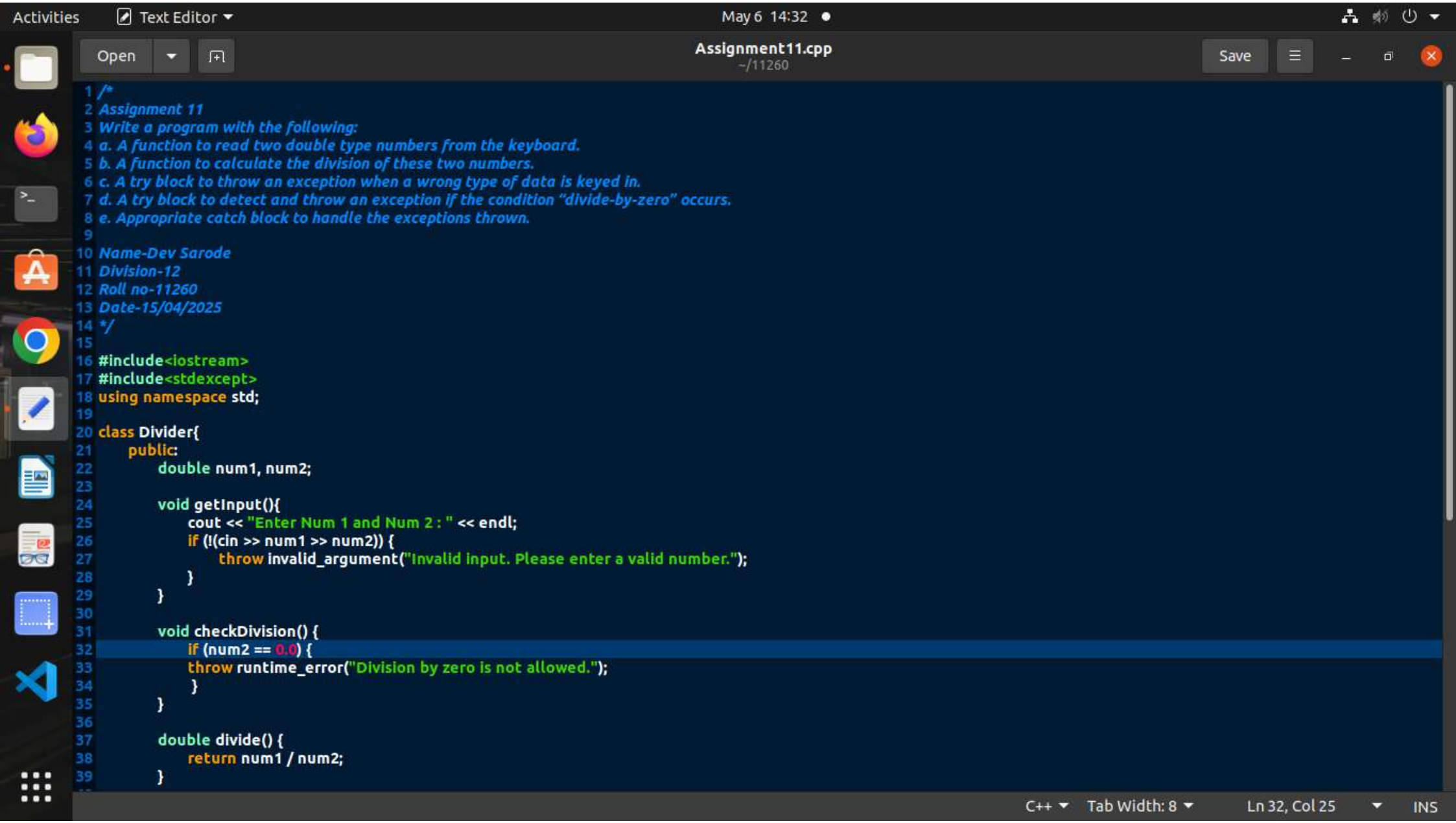
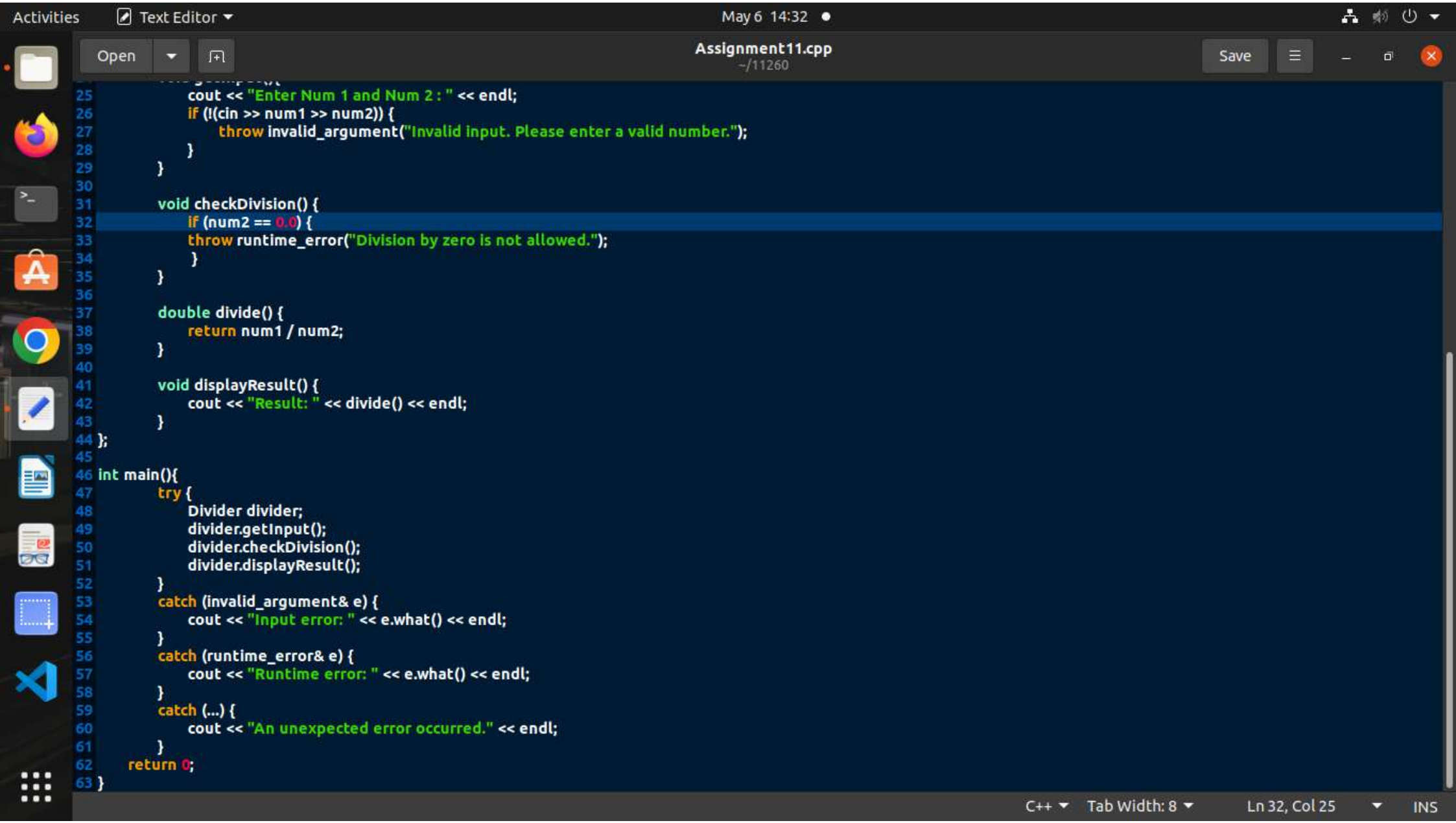
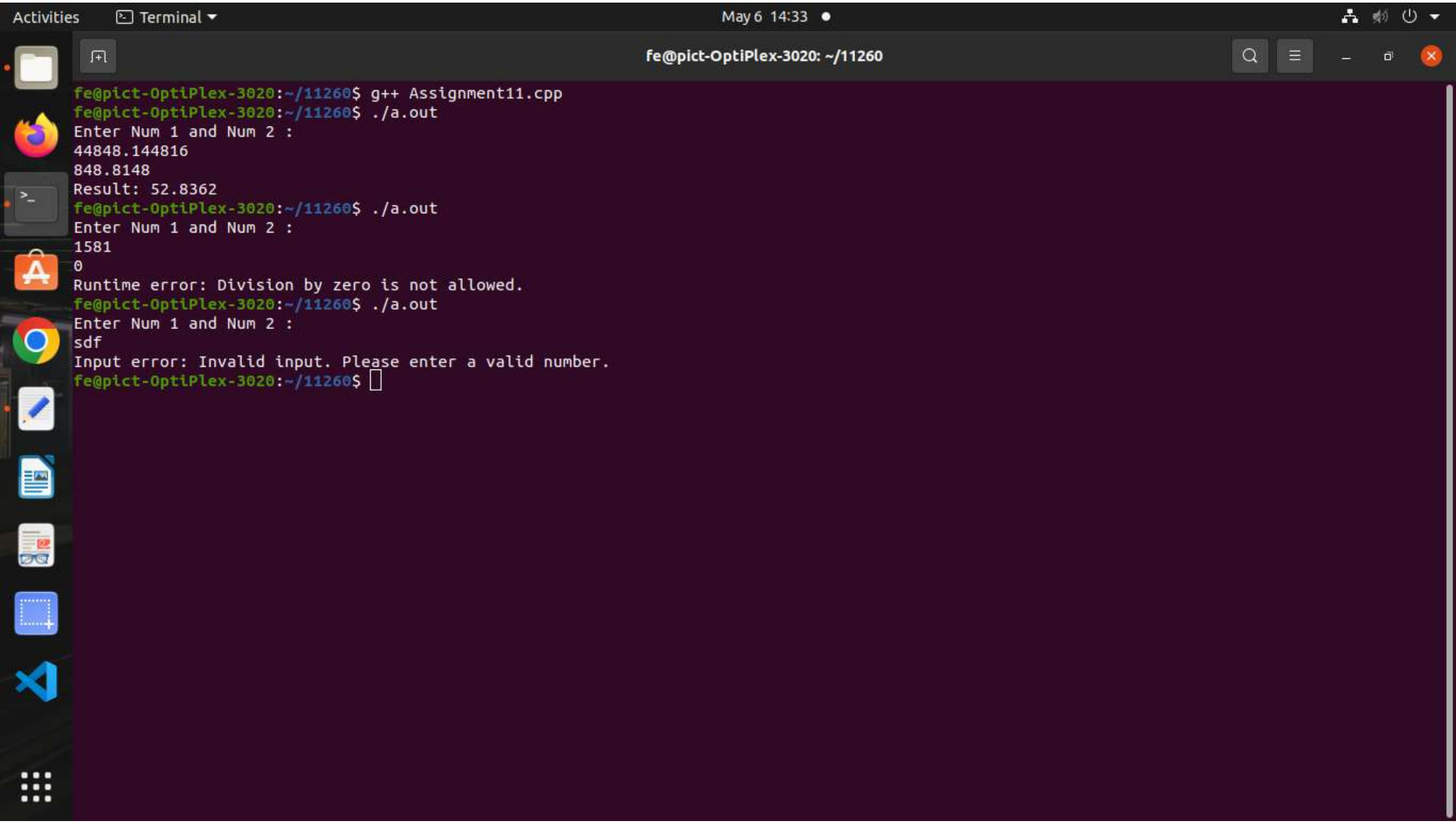

Activities
Text Editor
May 6 14:32
Open
Assignment11.cpp
~/11260
Save
/*
Assignment 11
Write a program with the following:
a. A function to read two double type numbers from the keyboard.
b. A function to calculate the division of these two numbers.
c. A try block to throw an exception when a wrong type of data is keyed in.
d. A try block to detect and throw an exception if the condition "divide-by-zero" occurs.
e. Appropriate catch block to handle the exceptions thrown.
Name-Dev Sarode
Division-12
Roll no-11260
Date-15/04/2025
*/
#include<iostream>
#include<stdexcept>
using namespace std;
class Divider{
public:
double num1, num2;
void getInput(){
cout << "Enter Num 1 and Num 2 : " << endl;
if (!(cin >> num1 >> num2)) {
throw invalid_argument("Invalid input. Please enter a valid number.");
}
}
void checkDivision() {
if (num2 == 0.0) {
throw runtime_error("Division by zero is not allowed.");
}
}
double divide() {
return num1 / num2;
}
C++
Tab Width: 8
Ln 32, Col 25
INS


Activities
Text Editor
May 6 14:32
Open
Assignment11.cpp
~/11260
Save
cout << "Enter Num 1 and Num 2 : " << endl;
if (!(cin >> num1 >> num2)) {
throw invalid_argument("Invalid input. Please enter a valid number.");
}
}
void checkDivision() {
if (num2 == 0.0) {
throw runtime_error("Division by zero is not allowed.");
}
}
double divide() {
return num1 / num2;
}
void displayResult() {
cout << "Result: " << divide() << endl;
}
};
int main(){
try {
Divider divider;
divider.getInput();
divider.checkDivision();
divider.displayResult();
}
catch (invalid_argument& e) {
cout << "Input error: " << e.what() << endl;
}
catch (runtime_error& e) {
cout << "Runtime error: " << e.what() << endl;
}
catch (...) {
cout << "An unexpected error occurred." << endl;
}
return 0;
}
C++
Tab Width: 8
Ln 32, Col 25
INS


Activities
Terminal
May 6 14:33
fe@pict-OptiPlex-3020: ~/11260
fe@pict-OptiPlex-3020:~/11260$ g++ Assignment11.cpp
fe@pict-OptiPlex-3020:~/11260$ ./a.out
Enter Num 1 and Num 2 :
44848.144816
848.8148
Result: 52.8362
fe@pict-OptiPlex-3020:~/11260$ ./a.out
Enter Num 1 and Num 2 :
1581
0
Runtime error: Division by zero is not allowed.
fe@pict-OptiPlex-3020:~/11260$ ./a.out
Enter Num 1 and Num 2 :
sdf
Input error: Invalid input. Please enter a valid number.
fe@pict-OptiPlex-3020:~/11260$