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**PRN - B24cCE1079**

**Subject - Object Oriented Programming**

**Assignment 6**

/\*PROBLEM STATEMENT: Design a program with the following functionalities:

1. A function to read two numbers(Double type)
2. A function to calculate division of these two numbers
3. A try block to detect and throw an exception when divide by zero condition occurs
4. Appropriate catch block to handle the exception thrown\*/

**CODE**

```
#include <iostream>
#include <exception>
using namespace std;

// Function to read two numbers (Double type)
void readNumbers(double &a, double &b) {
    cout << "Enter the numerator (double): ";
    cin >> a;
    cout << "Enter the denominator (double): ";
    cin >> b;
}

// Function to calculate division.
double division(double a, double b) {
    if (b == 0.0) {
        throw "Error: Division by zero condition!";
    }
    return a / b;
}

int main() {
    double num1, num2, result;

    try {
        readNumbers(num1, num2);
        result = division(num1, num2);
        cout << "Result: " << result << endl;
    }

    catch (const char* e) {
```

```
        cout << "Exception Caught: " << e << endl;
    }

    // Catch-all for any other unexpected error
    catch (...) {
        cout << "An unexpected error occurred." << endl;
    }
    return 0;
}
```

## OUTPUT

```
Enter the numerator (double): 4
Enter the denominator (double): 5
Result: 0.8
```

```
Enter the numerator (double): 5
Enter the denominator (double): 0
Exception Caught: Error: Division by zero condition!
```