

Online Test 2 (4%)	OOP 2200 - 01
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Answer all of the following questions.

Q1. For the following function headers, determine the **number**, **type**, and **order** (sequence) of the values that must be passed to the function:

- Void factorial(int n)
 - number=1
 - type=integer
 - order= n is first
- Void price(int type, double yield, double maturity)
 - Number = 3
 - Type = integer , double
 - Order = yield, maturity, type
- Void interest(char flag, double price, double time)
 - Number= 2
 - Type = string , double
 - Order = time, price, flag
- Void total(double amount, double rate)
 - Number =2
 - Type = double
 - Order = rate, amount
- Void abc(int a, int b, char c, char d, double e, double f)
 - a=integer
 - b=integer
 - c=string
 - d=string
 - e=double

Q2.

- Write a function named **findAbs()** that accepts a double-precision number passed to it (from the main program), computes its absolute value, and displays the absolute value. A number's absolute value is the number itself if the number is positive and the negative of the number if the number is negative.
- Include the written function in a working program. Make sure your function is called from **main()**. Test the function by passing various data to it.

```
/** Test Question 2.cpp
 *
 * In this program we define a function that returns nothing and has
 * no parameters.
 *
 * @author Luv Modi
 * @version 2021.02
 */
#include <cstdlib>
#include <iostream>
double inputValue;
using namespace std;

double findAbs(double inputValue);

int main()
{
    double inputValue, resultValue;
    cout << "Enter Number to find the absolute value: " << endl;
    cin >> inputValue;

    resultValue = findAbs(inputValue);
    cout << resultValue << " is the absolute value of " << inputValue;

}

double findAbs(double inputValue){
    return abs(inputValue);
}


```

FILEMS OUTPUT DEBUG CONSOLE TERMINAL

```
.exe: fatal error: no input files
Compilation terminated.
C:\Users\Luv\Desktop\College\OOP> cd "c:\Users\Luv\Desktop\College\OOP" ; if ($?) { g++ test_question_2.cpp -o test_question_2 } ; if ($?) { .\test_question_2 }
.exe: error: test_question_2: No such file or directory
.exe: error: 2.cpp: No such file or directory
.exe: error: 2: No such file or directory
pen folder in new window (ctrl + click)
C:\Users\Luv\Desktop\College\OOP> cd "c:\Users\Luv\Desktop\College\OOP" ; if ($?) { g++ test_question_2.cpp -o test_question_2 } ; if ($?) { .\test_question_2 }
Enter Number to find the absolute value:
0
0 is the absolute value of 0
C:\Users\Luv\Desktop\College\OOP> cd "c:\Users\Luv\Desktop\College\OOP" ; if ($?) { g++ test_question_2.cpp -o test_question_2 } ; if ($?) { .\test_question_2 }
Enter Number to find the absolute value:
-565
-565 is the absolute value of -57.565
C:\Users\Luv\Desktop\College\OOP>
```

Q3.

- Describe the difference between a global static variable and a global extern variable.
 - A global static variable is one that can only be accessed in the file where it is created. This variable is said to have file scope.
 - It is possible to create a global variable in one file and access it from another file. In order to do this, the variable must be declared in both files, but the keyword extern must precede the "second" declaration.
 - If a variable is declared with an extern storage category, what other declaration statement must be present somewhere in the program?
 - #include <studio>
-

Q4. Write function headers for the following functions:

- A function named **mult()** that accepts two floating-point numbers as parameters, multiplies these two numbers, and returns the result.
 - #include "InputMultiplier"
- A function named **findAbs()** that accepts a double-precision number passed to it and returns that number's absolute value.
- A function named **square()** that computes and returns the square of the integer value passed to it.

Submission Details

- The name of this document should be "**YourName_Online_Test2.docx**".
- Include a screenshot of the written program (code in Q2) and the result after running programs.

3. Make sure your **code** and **comments** are readable.
4. Copied work will be graded to zero and reported as an academic integrity offence.