```
********************************************************************************
********************************************************************************
**                                                                            **
**                          test.cc listing                                   **
**                                                                            **
********************************************************************************
********************************************************************************

#include <iostream>
using namespace std;

//Can also use "int" type to return true/false
bool user_says_yes();

int main(){
        //Ask user question
        cout << "Do you enjoy cake? Y/N: ";

        //Output based on user response
        if (user_says_yes())
                cout << "You enjoy cake!" << endl;
        else
                cout << "You hate cake!" << endl;
        }


//Checks user input to ensure correct type/data has been inputted
//Returns bool "true" if user says yes, bool "false" if user says no
bool user_says_yes(){
        char userinput;          //input – response to y/n question
        cin >> userinput;

        //Input validation
        while (!((userinput == 'Y') || (userinput == 'y') ||
                (userinput == 'N') || (userinput == 'n'))){
                cout << "Bad input; "
                        << "Type Y/y for Yes, N/n for No; "
                        << "Please try again: ";
                cin >> userinput;
                }

        //return result
        if ((userinput == 'Y') || (userinput == 'y'))
                return true;    //ANY NUMBER other than '0' also means true
        else
                return false;   //'0' also means same as "false"
        }
```

```
********************************************************************************
********************************************************************************
**                                                                            **
**                          test.cc compilation                               **
**                                                                            **
********************************************************************************
********************************************************************************

c++ compilation succeeded
```

```
*************************************************************************
*************************************************************************
**                                                                     **
**          test.cc execution – unstructured testcase 1 [#1]           **
**                                                                     **
*************************************************************************
*************************************************************************

Do you enjoy cake? Y/N: Y
You enjoy cake!
```

```
*************************************************************************
*************************************************************************
**                                                                     **
**          test.cc execution – unstructured testcase 2 [#2]           **
**                                                                     **
*************************************************************************
*************************************************************************

Do you enjoy cake? Y/N: y
You enjoy cake!
```

```
********************************************************************************
********************************************************************************
**                                                                            **
**            test.cc execution – unstructured testcase 3 [#3]                **
**                                                                            **
********************************************************************************
********************************************************************************

Do you enjoy cake? Y/N: N
You hate cake!
```

```
********************************************************************************
********************************************************************************
**                                                                            **
**            test.cc execution – unstructured testcase 4 [#4]                **
**                                                                            **
********************************************************************************
********************************************************************************

Do you enjoy cake? Y/N: n
You hate cake!
```

```
******************************************************************************
******************************************************************************
**                                                                          **
**              test.cc execution – unstructured testcase 5 [#5]            **
**                                                                          **
******************************************************************************
******************************************************************************

Do you enjoy cake? Y/N: a
Bad input; Type Y/y for Yes, N/n for No; Please try again: b
Bad input; Type Y/y for Yes, N/n for No; Please try again: c
Bad input; Type Y/y for Yes, N/n for No; Please try again: d
Bad input; Type Y/y for Yes, N/n for No; Please try again: e
Bad input; Type Y/y for Yes, N/n for No; Please try again: f
Bad input; Type Y/y for Yes, N/n for No; Please try again: 1
Bad input; Type Y/y for Yes, N/n for No; Please try again: 2
Bad input; Type Y/y for Yes, N/n for No; Please try again: 3
Bad input; Type Y/y for Yes, N/n for No; Please try again: 4
Bad input; Type Y/y for Yes, N/n for No; Please try again: 5
Bad input; Type Y/y for Yes, N/n for No; Please try again: $
Bad input; Type Y/y for Yes, N/n for No; Please try again: .
Bad input; Type Y/y for Yes, N/n for No; Please try again: T
Bad input; Type Y/y for Yes, N/n for No; Please try again: [
Bad input; Type Y/y for Yes, N/n for No; Please try again: =
Bad input; Type Y/y for Yes, N/n for No; Please try again: ^
Bad input; Type Y/y for Yes, N/n for No; Please try again: AB
Bad input; Type Y/y for Yes, N/n for No; Please try again: Bad input; Type Y/y f
or Yes, N/n for No; Please try again: 123
Bad input; Type Y/y for Yes, N/n for No; Please try again: Bad input; Type Y/y f
or Yes, N/n for No; Please try again: Bad input; Type Y/y for Yes, N/n for No; P
lease try again: 12Y
Bad input; Type Y/y for Yes, N/n for No; Please try again: Bad input; Type Y/y f
or Yes, N/n for No; Please try again: You enjoy cake!
```