

**AIM:-** Write a C program to test whether a given identifier is valid or not.

**Logic:-**

- Read the given input string.
- Check the initial character of the string is numerical or any special character except '\_' then print it is not a valid identifier.
- Otherwise print it as a valid identifier if the remaining characters of the string don't contain any special characters except '\_'.

**CODE:-**

```
#include <iostream>
#include <string.h>
using namespace std;
int main()
{
    char inp[20];
    cout << "Enter Input String :: ";
    cin >> inp;
    if (int(inp[0]) >= 65 && int(inp[0]) <= 90 || int(inp[0]) >= 97 && int(inp[0]) <= 122
    || int(inp[0]) == 95)
    {
        for (int i = 0; i < strlen(inp); i++)
        {
            if (int(inp[i]) >= 48 && int(inp[i]) <= 57 || int(inp[i]) >= 65 &&
int(inp[i]) <= 90 || int(inp[i]) >= 97 && int(inp[i]) <= 122 || int(inp[i]) == 95)
            {
            }
            else
            {
                cout << "Not a valid identifier.\n";
                exit(0);
            }
        }
        cout << "Is a valid identifier.\n";
    }
    else
    {
        cout << "Not a valid identifier.\n";
    }
    return 0;
}
```

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**OUTPUT:-**

```
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ g++ isIdentifier.cpp
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ ./a.out
Enter Input String :: qwerty
Is a valid identifier.
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ ./a.out
Enter Input String :: _satvik
Is a valid identifier.
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ ./a.out
Enter Input String :: qw_ert
Is a valid identifier.
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ ./a.out
Enter Input String :: _98
Is a valid identifier.
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ ./a.out
Enter Input String :: 12
Not a valid identifier.
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ ./a.out
Enter Input String :: qw@!#
Not a valid identifier.
satvik--naik@pop-os:/media/satvik--naik/MyDesk/CLG/SEM7/CD/Compiler-Design/E1$ █
```