

Getline Function()C++

The cin is an object which is used to take input from the user but does not allow to take the input in multiple lines. To accept the multiple lines, we use the getline() function. It is a pre-defined function defined in a **<string.h>** header file used to accept a line or a string from the input stream until the delimiting character is encountered.

```
#include <iostream>
#include<string.h>
using namespace std;
int main()
{
string name;
cout << "Enter your name : " << endl;
cin >> name;
cout << "\nHello " << name;
return 0;
}
```

cin does not consider the character when the space character is encountered.

resolve the above problem by using getline() function.

getline() function to accept the character even when the space character is encountered.

```
#include <iostream>

#include<string.h>

using namespace std;

int main()

{

string name;

cout << "Enter your name : " << endl;
```

```
getline(cin,name);

cout<<"\nHello "<<name;

return 0;

}
```

When we do not want to read the character after space then we use the following code:

```
#include <iostream>
#include<string.h>
using namespace std;
int main()
{
string profile;
cout << "Enter your profile : " << endl;
getline(cin,profile,' ');
cout<<"\nProfile is : "<<profile;
}
```

Getline Character Array

Syntax

```
istream& getline(char* , int size);
```

char*: It is a character pointer that points to the array.

Size: It acts as a delimiter that defines the size of the array means input cannot cross this size.

example.

```

#include <iostream>
#include<string.h>
using namespace std;
int main()
{
    char fruits[50];
    cout<< "Enter your favorite fruit: ";
    cin.getline(fruits, 50);
    cout << "\nYour favorite fruit is :"<<fruits <<endl;
    return 0;
}

```

C++ Files and Streams

we are using the **iostream** standard library, it provides **cin** and **cout** methods for reading from input and writing to output respectively.

To read and write from a file we are using the standard C++ library called **fstream**.

fstream	It is used to create files, write information to files, and read information from files.
ifstream	It is used to read information from files.
ofstream	It is used to create files and write information to the files.

Example: writing to a file

```

#include <iostream>
#include <fstream>
using namespace std;
int main ()
{
    ofstream filestream("myFile.txt");
    if (filestream.is_open())
    {

```

```

        filestream << "Welcome to MyFile.\n";
        filestream << "C++ File handling.\n";
        filestream.close();
    }
    else
    {
        cout << "File opening is fail.";
    }
}

```

Example: reading from a file

Before running the code a text file named as **"myFile.txt"** is need to be created with content.

```

#include <iostream>
#include <fstream>
using namespace std;
int main ()
{
    string srg;
    ifstream filestream("myFile.txt");
    if (filestream.is_open())
    {
        while ( getline (filestream,srg) )
        {
            cout << srg << endl;
        }
        filestream.close();
    }
    else
    {
        cout << "File opening is fail."<< endl;
    }
}

```

Example :: Read and Write

```
#include <fstream>
#include <iostream>
using namespace std;
int main ()
{
    char input[75];
        ofstream os;
        os.open("data.txt");
        cout << "Writing to a text file:" << endl;
        cout << "Please Enter your name: ";
        cin.getline(input, 100);
        os << input << endl;
        cout << "Please Enter your age: ";
        cin >> input;
        cin.ignore();
        os << input << endl;
        os.close();
        // Reading from file
        ifstream is;
        string line;
        is.open("data.txt");
        cout << "Reading from a text file:" << endl;
        while (getline (is,line))
        {
            cout << line << endl;
        }
        is.close();
}
```