

Assignment no:- 15

Sycon124

Aim:- Write a c++ program to check character is uppercase, lowercase, digit or special character.

Theory:-

1]

→ If-else statement is a decision structure. if keyword allows us to check some conditions and if the conditions get true then only the statements inside if block gets executed. else keyword act opposite to if else statement doesn't check any conditions it is get executed when if statement execution ~~gets~~ is doesn't happen.

Syntax:-

```
if (conditions)
{
    // statement.
}
else
{
    // statement.
}
```

→ 2] If-else statement has basically three types:-

1] only if;

2] only if-else;

3] if-else-if ladder;

- 1] If statement allows use to execute a particular code after the true result of particular condition.

```
if (condition)
{
    // statements.
}
```

- 2] If-else state allows user to execute a sin particular code (say code 1) on true condition and a second particular code (say code 2) on the false of if condition.

```
if (condition)
{ // statements.
}
else
{ // statements. }
```

- 3] If-else-if it is a ladder of if-else statements which allows user to run a particular code after the true value of particular condition. Like if-else it has one more ~~an~~ condition when else-if keyword is used. This ladder has no limit. it can stopped when an only else keyword and its code is written.

This ladder allows user to select / check multiple condition for multiple situations.

We have implemented this ladder in ~~our~~ our above program.

CODE:

```
/*
NAME: SARVESH BAPUSAHEB CHAVAN
ROLL NO : SYCOA124
*/
#include <iostream>
#include <iomanip>
using namespace std;
int main()
{
    int i = 0, a;
    char b, choice;
    do
    {
        cout << endl
             << "enter a character to check :" << endl;
        cin >> b;
        a = ((int)b);
        if ((a >= 32 && a <= 47) || (a >= 60 && a <= 64) || (a >= 91 && a <=
96) || (a >= 123 && a <= 126))
        {
            cout << "character " << b << " is a special character." << endl;
        }
        else if ((a > 64 && a < 91) || (a > 96 && a < 123))
        {
            cout << "character " << b << " is a alphabate." << endl;
        }
        else if (a >= 48 && a <= 57)
        {
            cout << "character " << b << " is a number." << endl;
        }
        else
        {
            cout << "not a valid character." << endl;
        }
        cout<<"want to continue:y)yes"<<endl;
        cin>>choice;
    } while (choice=='y');

    return 0;
}
```

OUTPUT:

enter a character to check :

A

character A is a alphabate.

want to continue:y)yes

y

enter a character to check :

5

character 5 is a number.

want to continue:y)yes

n

PS D:\program\secondyear> █