

Department of Electrical Engineering

Subject C++

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Q 1

Part (A)

Give 3 reasons why it's important to comment your code. What are the 2 different ways to comment code in C++ and how are they different?

Answer:

In computer programming a comment is a programmer-readable explanation or annotation in the source code of a computer program. They are added with the purpose of understanding and generally ignored by compilers and interpreters.

Q 1. Part B:

What are the two different commands used to output a new line in C++?

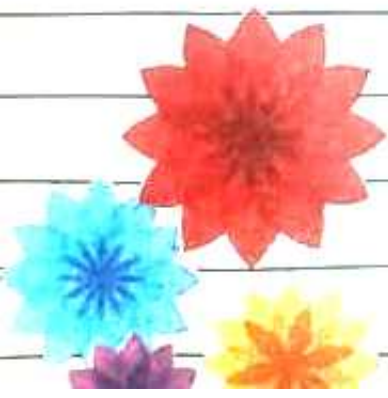
Answer:

i) `endl` is a command used to move to the next

line.

`cout << endl`

ii) For new line `\n` is called also used



Q 1 Part C:

Show the difference between IF-ELSE and nested IF conditions? (2 marks)

Answer:

The if else statement executes two different codes depending upon whether the tested expression is true or false. The nested if else statement allow you to check for multiple test expressions and execute different code for more than two conditions.

Q 1 Part (D)

What is a nested loop? Give a nested For loop example and the exact number of times the loop will run. (2 Marks)

Answer:

Nested loop means a loop statement inside another loop that why nested loop are also called as "loop inside loop".

Example.

```
for (i=0; i < row; i++)
  for (j=0; j < col; j++)
```

```
cout << matrix[i][j]
```

```
cout << "\n";
```

Q2:

Write ~~the~~ a program (starting from #include) that asks the user for numbers 10 times, after the numbers have been entered product of all the numbers should be displayed. During the program if a positive number is entered it should continue and ask for another number, if a negative number is entered the program should end and output the product of all the positive entries. A sample run should appear on the screen like the text below. (12 Marks):

Enter a number: 3

Enter a number: 10

Enter a number: 2

Enter a number: -213

The product of all your positive numbers is 60.

Answer:

```
#include <iostream>
```

```
using namespace std;
```

```
int main ()
```

```
{
```

```
int a [10];
```

```
int temp;
```

```
int counter = 0;
```

```
int answer = 1;
```

```
for (int i = 0; i < 10; i++)
```

```
cout << "enter number " << i + 1 << " : " << "
```

```
cin >> temp;
```

```
if (temp >= 0) {
```

```
    a [i] = temp;
```

```
    counter ++;
```

```
}
```

```
else {
```

```
    break;
```

}

}

```
for (int i = 0; i < counter; i++)
```

```
    answer = answer * a[i];
```

}

```
cout << answer;
```

```
return 0;
```



Q3(a):

Answer:

```
#include <iostream>
using namespace std;
void main () {
```

```
int total = 0
```

```
cout << "Enter a number: " <<
```

```
int b <<
```

```
cin >> b <<
```

```
total = total + b <<
```

```
double average = total / 2
```

```
cout << "The average is " << average << "\n";
```

Q3(b)

Answer:

out put =>

32767



The END