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Statements and Conditions

C++ has only three kinds of control structures, or control statements and three types of repetition statements.

Control Statements

1) if
2) if...else
3) switch

Repetition Statements

1) while
2) for
3) do...while

if statement

```
if ( grade >= 60 )
cout << "Passed";
```

if and else

```
if ( grade >= 60 )
cout << "Passed";
else
cout << "Failed";
```

If else (continue)

```
if ( studentGrade >= 90 ) // 90 and above gets "A"
cout << "A";
else if ( studentGrade >= 80 ) // 80-89 gets "B"
cout << "B";
else if ( studentGrade >= 70 ) // 70-79 gets "C"
cout << "C";
else if ( studentGrade >= 60 ) // 60-69 gets "D"
cout << "D";
else // less than 60 gets
cout << "F";
```

Switch statement

```
switch ( grade ) // switch statement nested in while
{
case 'A': // grade was uppercase A
cout<<”Student has A Grade” << endl;
break;
case 'B': // or lowercase a
cout<<”Student has B Grade” << endl;
break; // necessary to exit switch
default:
break;
}
```

while Repetition Statement

A repetition statement repeats an action while some condition remains true.

```
while ( product <= 100 )
product = 3 * product;
```

do .. while (loop statement)

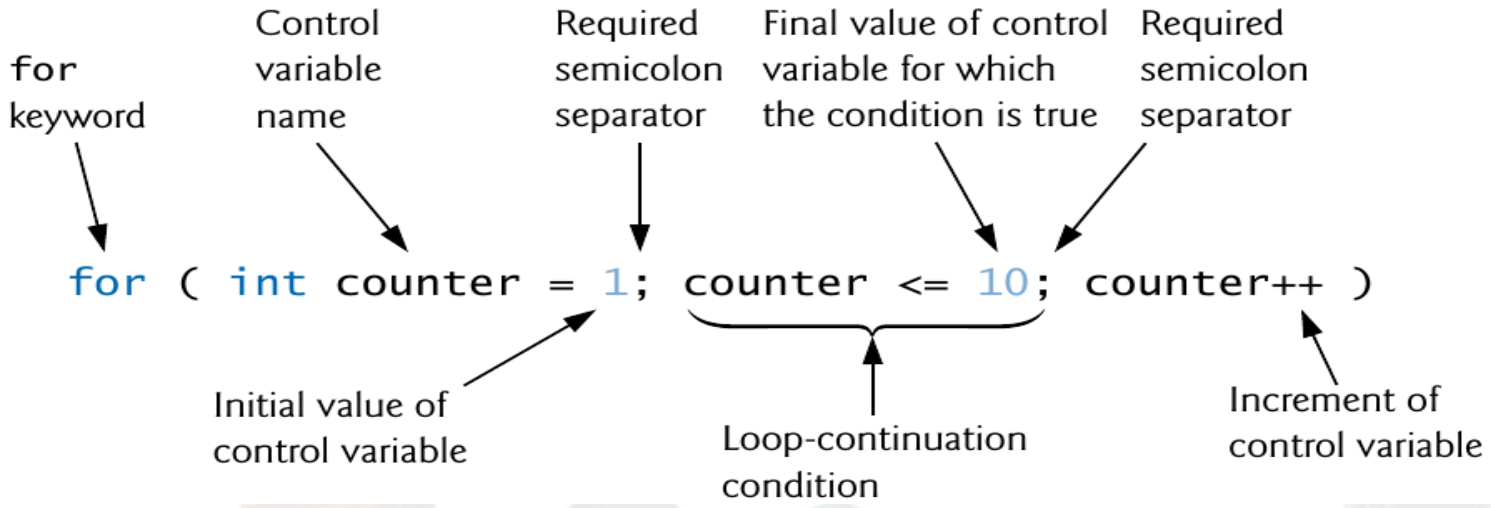
```
do
{
cout << counter << " "; // display counter
++counter; // increment counter
} while ( counter <= 10 ); // end do...while
```

for loop - Repetition Statement

// loop-continuation condition and increment.

for (int counter = 1; counter <= 10; ++counter)

cout << counter << " ";



Make a structure of cars having 3 data types. e.g.

1. Model_name
2. Year
3. Price
4. Manufacturer_name
5. Color
6. Car_type
7. Company