


C++ / JavaScript / PHP

| Features | C++ | JavaScript | PHP |
|----------------------|---|---|---|
| Source Code | Statements within main() function | Statements within <SCRIPT> and </SCRIPT> | Statements within <?php and ?> |
| Data types | int, char, float, double, void | Number, String, Boolean | Integer, Float, String, Boolean |
| Variables | User defined words. Consists of letters and digits. | Same | Same but begins with \$ symbol |
| Variable declaration | data_type variable; (int a;) | var variable; (var a;) | No declaration |
| Arithmetic operators | + - * / % | Same | Same |
| Increment, decrement | ++ -- | Same | Same |
| Assignment operators | = += -= *= /= %= | Same | Same |
| Relational operators | < <= > >= == != | Same | Same |
| Logical operators | && ! | Same | Same |
| String concatenation | strcat() function // strcat(s1;s2); | + operator (str=string1+string2;) | Dot (.) operator (str=string1.string2;) |
| if statements | if (test_expression) Statement; | Same | Same |
| | if (test_expression) statement_1; else statement_2; | Same | Same |
| | if (test_expression1) statement_1; else if (test_expression2) statement_2; : : else statement_n; | Same  | Same |

| | | | |
|---------------------|---|--|---|
| switch statement | <pre>switch (variable/expression) { case value1: statement1; break; case value2: statement2; break; : : default: statement; }</pre> | Same | Same |
| for loop | <pre>for (initialization; test; update) body;</pre> | Same | Same |
| while loop | <pre>initialization; while (test_expression) { body; update; }</pre> | Same | Same |
| do – while loop | <pre>initialization; do { body; update; } while (test_expression);</pre> | Same | Same |
| Input statement | <pre>cin >> variable; (cin >> a);</pre> | <pre>variable = document.Form_Name.Textbox_Name.Value;</pre> | <pre>variable = \$_POST['Control_Name']; variable = \$_GET['Control_Name'];</pre> |
| Output statement | <pre>cout << variable / expression / constant;</pre> | <pre>document.write(variable / constant / tag);</pre> | <pre>echo variable/constant/expression; print variable/constant/expression;</pre> |
| Function definition | <pre>data_type function_name(args) { statements; }</pre> | <pre>function function_name() { statements; }</pre> | <pre>function function_name() { statements; }</pre> |

Programming Comparison

| Problem | C++ Code | JavaScript Code | PHP Code |
|-------------------------|--|---|--|
| Sum of 2 numbers | <pre>#include<iostream> using namespace std; { int a,b,s; cin>>a>>b; s=a+b; cout<<s; }</pre> | <pre><SCRIPT Language="JavaScript"> a = Number(document.frm.tbx1.value); b = Number(document.frm.tbx2.value); s = a + b; document.write(s); </SCRIPT></pre> | <pre><?php \$a = \$_POST['tbx1']; \$b = \$_POST['tbx2']; \$s = \$a + \$b; echo \$s; ?></pre> |
| Largest of 3 numbers | <pre>#include<iostream> using namespace std; { int a,b,c,big; cin>>a>>b>>c; if (a>b) big = a; else big = b; if (c>big) big = c; cout<<big; }</pre> | <pre><SCRIPT Language="JavaScript"> a = Number(document.frm.tbx1.value); b = Number(document.frm.tbx2.value); c = Number(document.frm.tbx3.value); if (a>b) big = a; else big = b; if (c>big) big = c; document.write(big); </SCRIPT></pre> | <pre><?php \$a = \$_POST['tbx1']; \$b = \$_POST['tbx2']; \$c = \$_POST['tbx3']; if (\$a>\$b) \$big = \$a; else \$big = \$b; if (\$c>\$big) \$big = \$c; echo \$big; ?></pre> |
| First N natural numbers | <pre>#include<iostream> using namespace std; { int i,n; cin>>n; for (i=1; i<=n; i++) cout<<i<<'\\n'; }</pre> | <pre><SCRIPT Language="JavaScript"> n = Number(document.frm.tbx.value); for (i=1; i<=n; i++) document.write(i + " "); </SCRIPT></pre> | <pre><?php \$n = \$_POST['tbx']; for (\$i=1; \$i<=\$n; \$i++) echo \$i." "; ?></pre> |