

CS120 Lab 5 Section 6

Heyan Huang

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Quiz for Week 4 & 5 **Answers**

- ▶ In C++ a library is a file containing code that can be used in other programs.
- ▶ A conditional is used in a program to control whether or not a piece of code is executed.
- ▶ The following code snippet will print Its true.

```
int x = 15;  
if(x + 20 > 2 * x){  
    cout << "Its true";  
}
```

Quiz for Week 4 & 5 **Answers:** Type Conversion

- ▶ The expression `1 || 1`, which represents `true || true` will evaluate to `true`.
- ▶ The following code snippet will print the value 2.

```
int x = 25;  
double y = 10;  
cout << x/y;
```

Quiz for Week 4 & 5 **Answers:** Loop

- ▶ The following code snippet will print the word here exactly ten times.

```
int x = 0;
while (x < 10) {
    cout << "here";
}
```

- ▶ A while loop can always be rewritten as a do-while loop and vice versa.
 - ▶ **demonstrate** using codes

Quiz for Week 4 & 5 **Answers:** Loop

- ▶ The following code snippet will print the word here exactly ten times.

```
int x = 0;
do {
    cout << "here";
} while (x < 10)
```

- ▶ After the following code snippet of code is done running x will have the value 9.

```
int x = 0;
while(x<10){
    cout << "here";
    x = x + 1;
}
```

Quiz for Week 4 & 5 **Answers:** Loop

- ▶ The following snippet of code will get stuck in an infinite loop.

```
int x = 1;  
while(x != 10){  
    cout << "here";  
    x = x + 2;  
}
```

Scores of Quiz3 & Lab3 & Lab4

► Lab 3 Distribution:

- Section 4: $2 * 9.5 / 21$; $19 * 10 / 21$;
- Section 6: $2 * 9.5 / 19$; $17 * 10 / 19$;

► Quiz for Week 4 Distribution:

Score	0	1	2	3	4	5	Missed
Section 4 Count (22)	1	1	4	4	8	3	1
Section 6 Count (24)	0	1	2	7	5	5	4

► Lab4 Distribution:

Score	6	6.5	7	7.5	8	10.5	11.5	12	12.5	Missed
Section 4 (22)	1	1		2		0	9	4	1	4
Section 6 (24)	1				1	1	10	4	1	6

Editor Command Set and Formatting

- ▶ Nano:
 - ▶ search for **nano cheat sheet**
- ▶ Emacs:
 - ▶ enter emacs: **emacs lab5.cpp**
 - ▶ **indent** source program:
 - ▶ **C-x h** to select the whole buffer
 - ▶ hit **Tab** key to autoindent the selected block of code
 - ▶ **C-x C-c** to exit from emacs, and type "**yes**" to **save buffer**
- ▶ Comment:
 - ▶ Block Comment is very important;
 - ▶ especially for this **lab5**
 - ▶ **Block comment** the parts who worked on which block/function

<cmath> Library

- ▶ <cmath> library Functions
 - ▶ `pow(base, exponent)`: Returns base raised to the power exponent;
 - ▶ prototype: `double pow (double base, double exponent);`
 - ▶ `sqrt(x)`: Returns the square root of x;
 - ▶ prototype: `double sqrt (double x);`

Powre Functions	Exponetnial Functions	Trigonometric Functions	Rounding Remainder
<code>pow</code>	<code>exp</code>	<code>cos</code>	<code>ceil</code>
<code>sqrt</code>	<code>log</code>	<code>sin</code>	<code>floor</code>
		<code>tan</code>	<code>trunc</code>

- ▶ try to remember the **Library names**
- ▶ try to remember the most frequently used **functions prototypes** within each library

Lab 5 Specific Requirements

- ▶ **cscheckin:**
 - ▶ **Source Program** only
- ▶ **Hard Copy:**
 - ▶ **Source Program**
 - ▶ script **Output** of the program
- ▶ **Exam Attention:**
 - ▶ **Exam** tomorrow **Friday, 2014/10/3**