CS120 Lab 5 Section 4

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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.

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

- 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;
```

- 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;
}
```

- 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
pow	exp	cos	ceil
sqrt	log	sin	floor
		tan	trunc

- ▶ 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 on this this Friday, 2014/10/3