



# CS150 Intro to CS I

Fall 2012

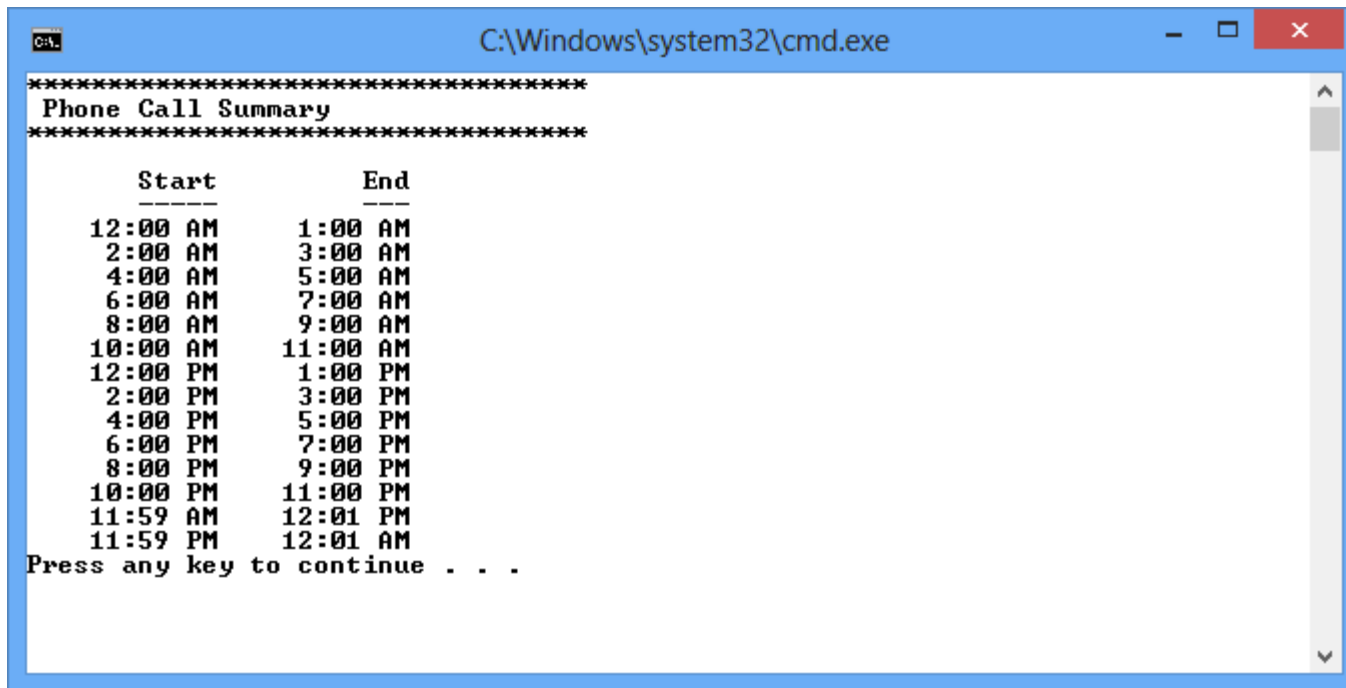
# Functions Practice

---

- Write a complete C++ program that reads in the starting and ending time of phone calls and displays them to the screen in a tabular format.
- You must convert the times from 24-hour format to 12 hour format.
- Here is a sample input file:

```
3
15:23 15:25
00:12 00:42
9:54 10:13
```

# Output



```
C:\Windows\system32\cmd.exe
*****
Phone Call Summary
*****

      Start      End
      -----      --
12:00 AM    1:00 AM
 2:00 AM    3:00 AM
 4:00 AM    5:00 AM
 6:00 AM    7:00 AM
 8:00 AM    9:00 AM
10:00 AM   11:00 AM
12:00 PM    1:00 PM
 2:00 PM    3:00 PM
 4:00 PM    5:00 PM
 6:00 PM    7:00 PM
 8:00 PM    9:00 PM
10:00 PM   11:00 PM
11:59 AM   12:01 PM
11:59 PM   12:01 AM
Press any key to continue . . .
```

# Function Prototypes

---

- Here are the function prototypes that you are to write the definitions for. Grab the solution PhoneCallsByReference in CS150-02 Public.

```
void displayTitle (string);
```

```
void displayHeading ();
```

```
void getTime (int &, int &, ifstream &);
```

```
void displayTime (int, int, char);
```

```
void convertTime (int, int, int &, char &);
```

# Military Times Are

<http://www.navycs.com/militarytime.html>

---

## Military Time to Standard Time Conversion Chart

<b>Military Time</b>	<b>Standard Time</b>	<b>Military Time</b>	<b>Standard Time</b>
0000	12 AM	1200	12 PM
0100	1 AM	1300	1 PM
0200	2 AM	1400	2 PM
0300	3 AM	1500	3 PM
0400	4 AM	1600	4 PM
0500	5 AM	1700	5 PM
0600	6 AM	1800	6 PM
0700	7 AM	1900	7 PM
0800	8 AM	2000	8 PM
0900	9 AM	2100	9 PM
1000	10 AM	2200	10 PM
1100	11 AM	2300	11 PM