



School of Computing

Bachelor of Science in Computing.

Programme Code: DT211/3

2012 – 2016

Network Programming

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Class Group	DT211/3
Assignment Number	1
Assignment Title	TxtClock
Date Issued	17/1/2015
Date Due For Return	13/2/2015
Date Returned	13/2/2015

Design Implementation:

I will break down the requirements specification down into even smaller parts, so that it will be easier to implement. Firstly I will try and take in agreements from the command line and see if they will pass through successfully assigning an int array like I have developed in the previous program Adder.

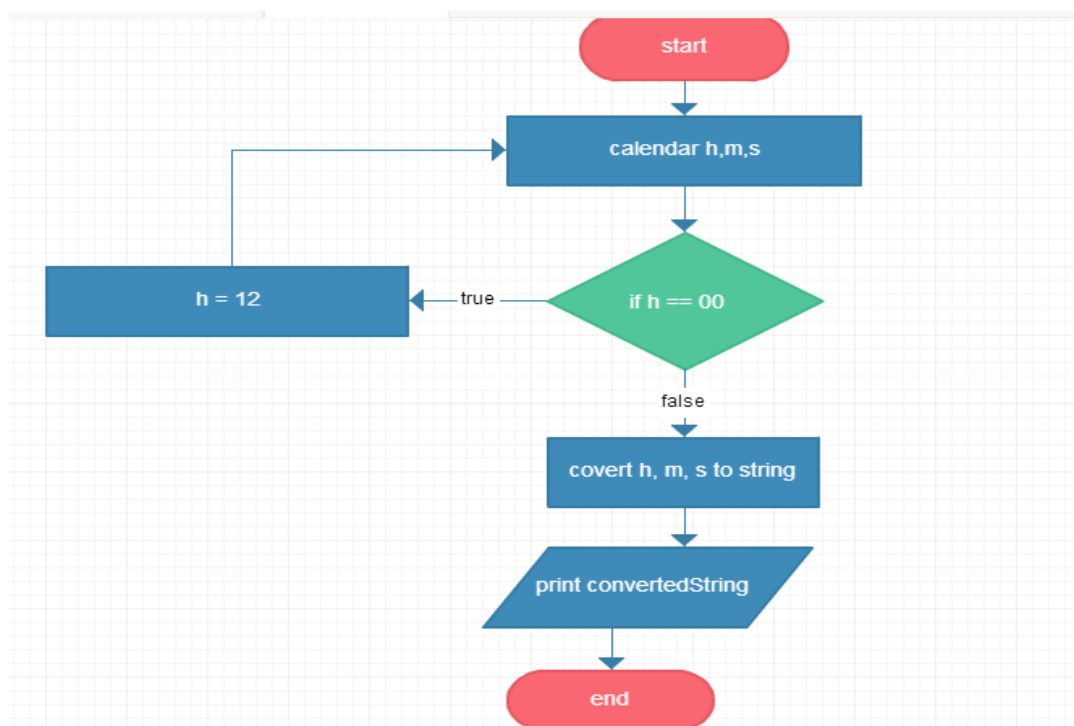
Once I am able to assign variables successfully and printed them off to their corresponding value, I will begin to implement my program.

Calendar Function

In my program I want to get the time from my computer calendar and I plan to use the calendar function that is used in java to get the current date and time.

I have designed a very basic flowchart to print out the time in string format, and if the hours is 00 it prints out 12, as I will be developing a 12 hour clock. The "00" to 12 will be necessary as I am getting the time from my calendar which is 24 hours and it will be important for when the user inputs their time into the machine as a 24 hour clock.

Flow Chart: Flow of local time function

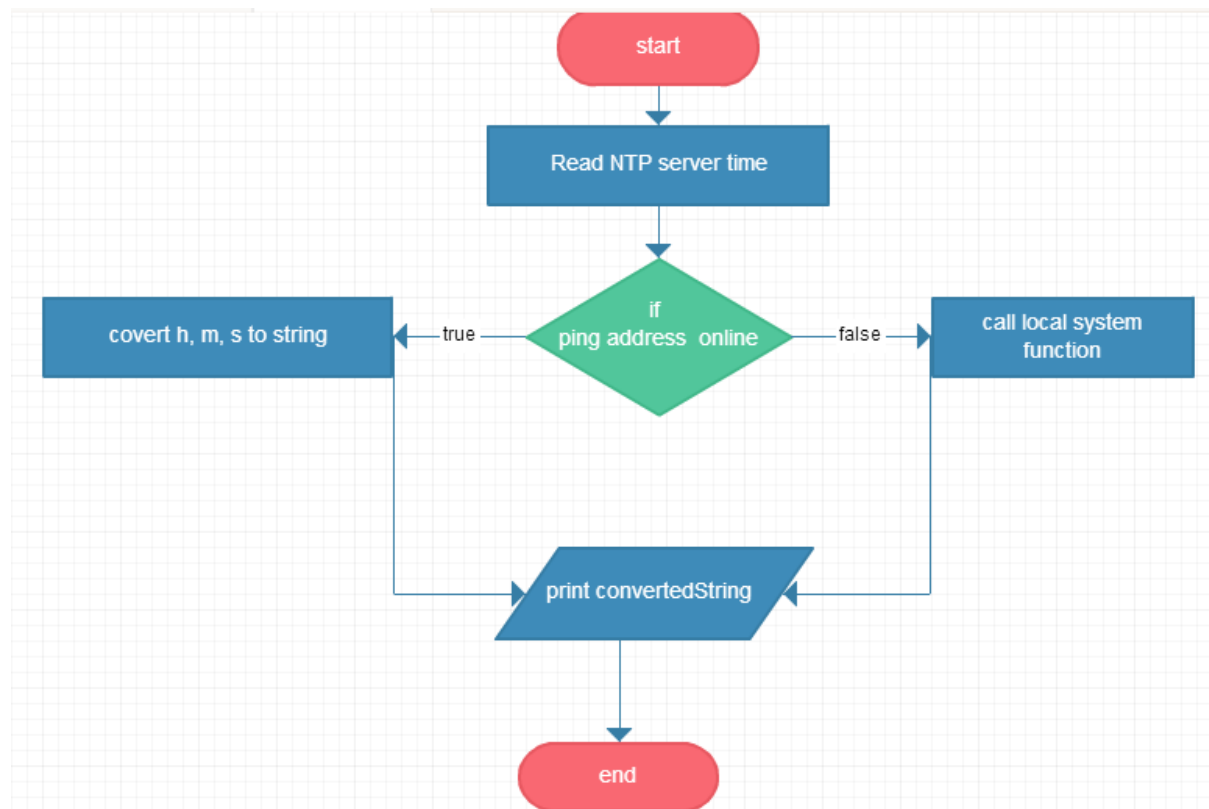


Once I can get the local time, I will develop a function that will change the input to a string (this function will also be used to convert the inputted time and the time from an NTP server).

NTP Function

I will then develop a function to obtain the time an NTP Server. I will have to do some research online to figure out what machine I will be taking the time from, and what port that machine is running off, most likely I will be using port 13 as it is the daytime Port internet protocol. I will also have to implement a design so when the WIFI is off or the computer is not connected to the internet, it will print off that you are offline, and display the time from the local computer.

Flow Chart: Flow of NTP client function



User input

In the user input I will have to develop functionality in my code that will allow for user input. This input should be as follows (24 hour clock) 15:34:54 for example. As it will be passed as an array string variable I will have to use the split function in java. This will allow for the String to be separated. Again as implemented from my previous program Adder, I will take in the input somewhat similar, but with the use of the String.split function.

Flow Chart: Flow of user input from command line

