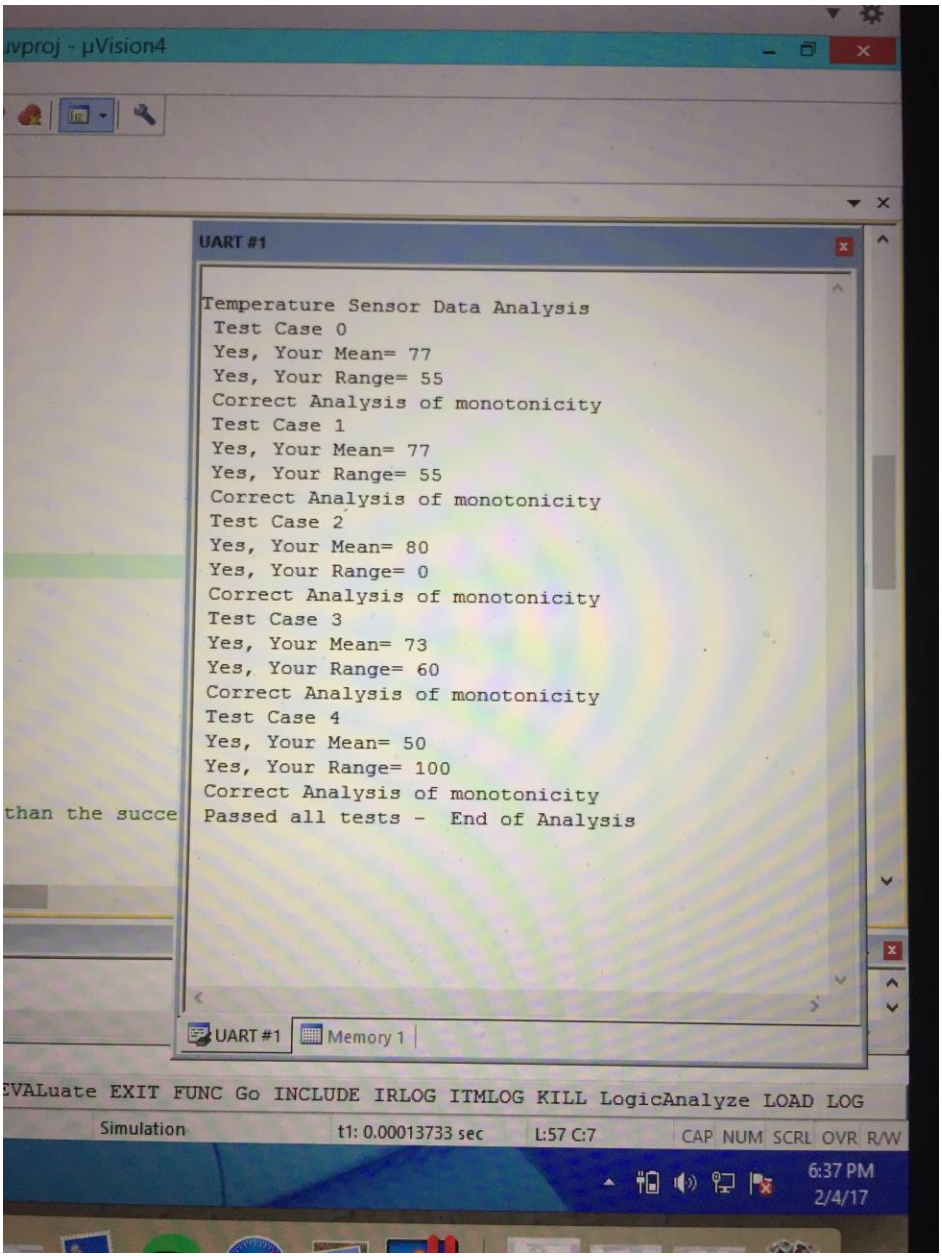
```
// Return the computed Mean
uint8_t Find_Mean(){
// Replace the following line with your solution
        uint8_t i;
        uint16_t z = 0;

        for (i = 0; i < N; i++){
                z += Readings[i];
        }

        uint8_t avg = z / N;

        return(avg);
}

// Return the computed Range
uint8_t Find_Range(){
// Replace ths following line with your solution

        uint8_t i;
        uint8_t x;
        uint8_t swapvalue;


                // Copy Readings[N] array to CopyArray[N]
        for (i = 0; i < N; i++)
                {
                        CopyArray[i] = Readings[i];
                }
```

```
	for (i = 0; i < N; i++)
	{
		for	(x = i + 1; x < N; x++)
			{
				if (CopyArray[i] < CopyArray[x])
{		// Switch elements when the preceding element is less than the succeeding element
					swapvalue = CopyArray[i];
					CopyArray[i] = CopyArray[x];
					CopyArray[x] = swapvalue;
}
			}
	}

	uint8_t range = CopyArray[0] - CopyArray[20];

	return(range);
}

// Return True of False based on whether the readings
// a non-increasing montonic series
uint8_t IsMonotonic(){
// Replace ths following line with your solution


	uint8_t i;
	uint8_t x;
	uint8_t swapvalue;
	uint8_t a = True;
```

```
        for (i = 0; i < N; i++)
        {
                for     (x = i + 1; x < N; x++)
                        {
                                if (Readings[i] < Readings[x])
                                        {       a = False;



                                        }

                        }
        }

        return (a);

}
```


ivproj - µVision4
UART #1
Temperature Sensor Data Analysis
Test Case 0
Yes, Your Mean= 77
Yes, Your Range= 55
Correct Analysis of monotonicity
Test Case 1
Yes, Your Mean= 77
Yes, Your Range= 55
Correct Analysis of monotonicity
Test Case 2
Yes, Your Mean= 80
Yes, Your Range= 0
Correct Analysis of monotonicity
Test Case 3
Yes, Your Mean= 73
Yes, Your Range= 60
Correct Analysis of monotonicity
Test Case 4
Yes, Your Mean= 50
Yes, Your Range= 100
Correct Analysis of monotonicity
Passed all tests - End of Analysis
than the succe
UART #1
Memory 1
EVALuate EXIT FUNC Go INCLUDE IRLOG ITMLOG KILL LogicAnalyze LOAD LOG
Simulation
t1: 0.00013733 sec
L:57 C:7
CAP NUM SCRL OVR R/W
6:37 PM
2/4/17