ICS2014 : Computer Organization and Architecture

Assignment #2:

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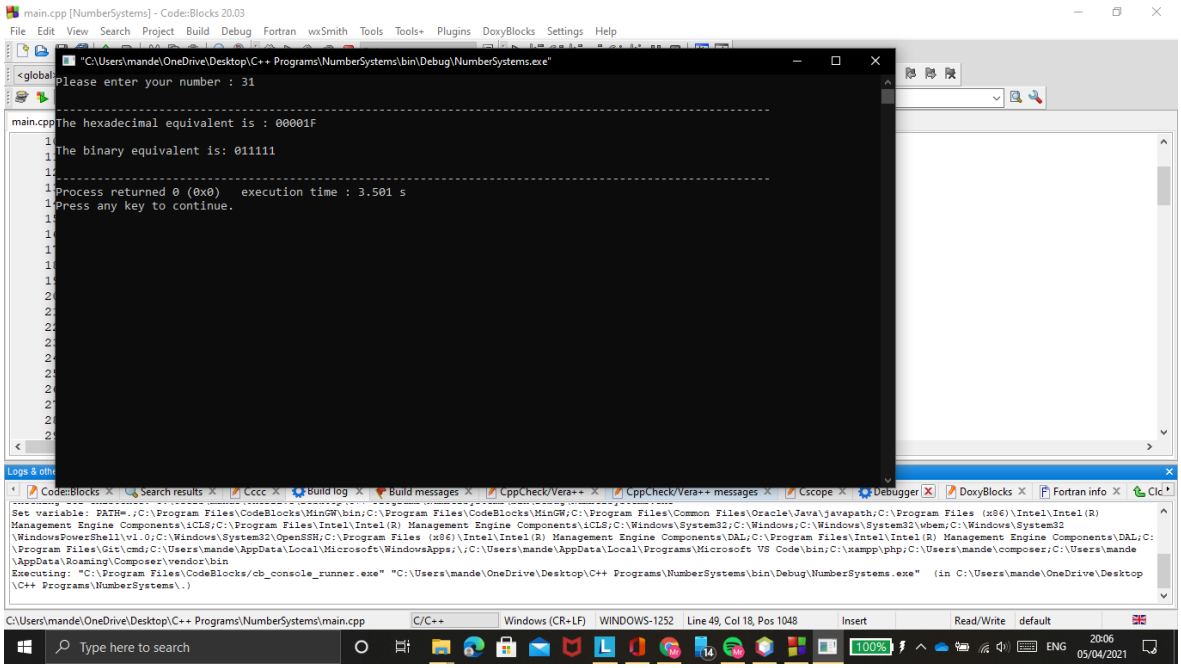
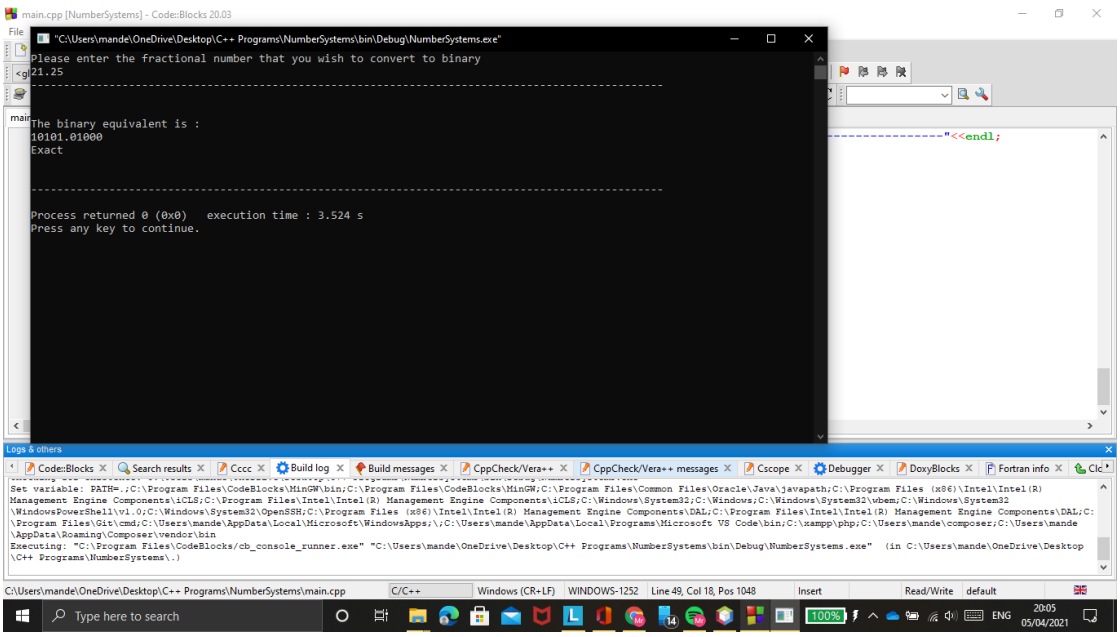
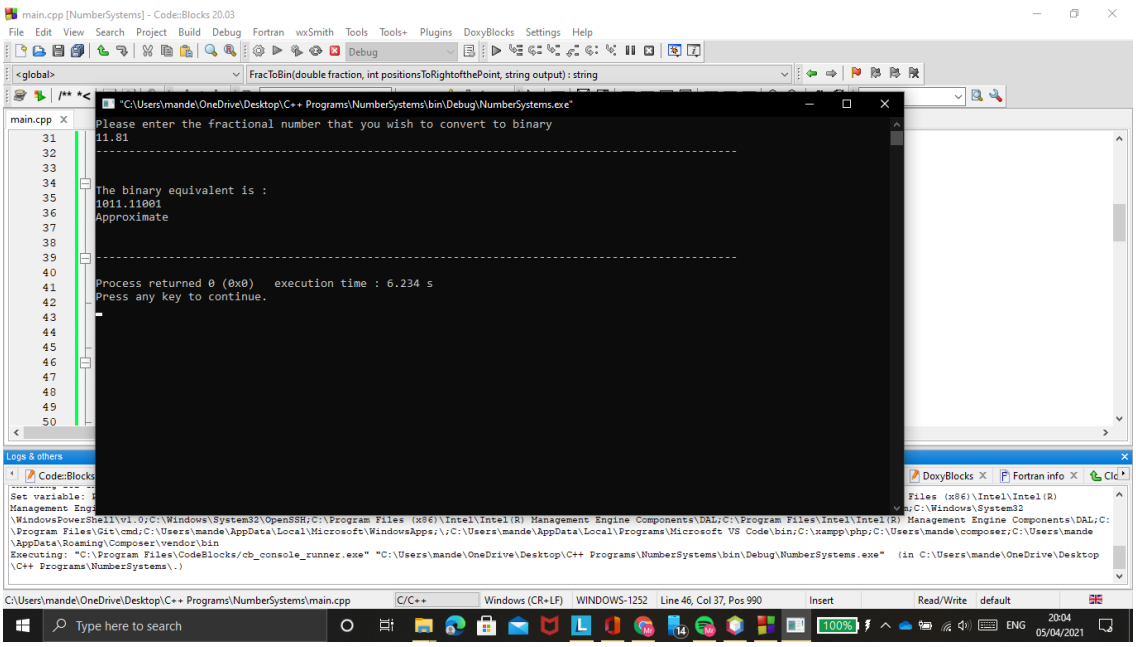
(a) Write a Java or C++ program to generate the information in Columns 2 and 3, starting from the Decimal values and then automatically generating the Binary and Hexadecimal Numbers shown in Table Q1 (a). The program created should be interactive and a user can prompt it to give the following table at once.



B) **Write a program (Java or C++) to convert from decimal notation to binary notation for thirty (30) randomly generated floating-point numbers with at most three decimal points e.g., 123.875. Your result should give a list of randomly generated numbers, resulting binary notation and remarks column having exactly or approximately (with at most five (5) decimal points). Table Q1 (b) shows a sample of an expected results for 11.81 and 21.25 respectively. The program should allow a user to interactively input values and get the conversions and statement on whether a number is exact or approximate.**





References

<Any additional references you use (either for background information or for citation) should be listed here, using the APA style>