

HOME WORK 2

Due Date: 14 February 2020. (before 5 pm)

Late submissions are allowed until the next day with 20% deduction.

Homework weightage: 5%

Question : (10 marks)

Write a program in which the user enters 3 choices (1, 2 or 3):

User enters 1- If the user enters 1, then the program should ask user for an input integer in base 10 and then convert it into Binary, Octal, hexadecimal and hexatridecimal.

User enters 2-If the user enters 2 the system should ask for target base and an integer. The user enters a value in base 10 and the system shows all the target base equivalents uptill that integer. So for example if the user enters 10 and binary as target base then the program should print the binary codes of all numbers from 1 to 10.

The program can make use of the builtin functions for Binary, Octal, and hexatridecimal (base 36).

Whereas the program should make use of mathematical division and remainder operators for hexadecimal.

User enters 3 - If the user enters 3 then the program should ask user to enter a string and then prints all characters that are non-ASCII and their unicode equivalents.

The program should keep on taking input until the user enters 0 (zero).

Marking will be based on accuracy of conversions and how user friendly the program output is.

To refresh your minds about hexadecimal conversion please see this link:

<https://www.permadi.com/tutorial/numDecToHex/>

*****Happy Java-ing*****