

# AP Computer Science



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## Bonus Assignment 1<sup>st</sup> Quarter: Hex->Bin->Decimal Converter

### Convert Hex to Binary

Hexadecimal: AF

A=10 and F=15

Binary: 1010 1111

### Convert Binary to Decimal

$2^N =$  128 64 32 16 8 4 2 1

$128 + 32 + 8 + 4 + 2 + 1 = 175$

AF = 175

Provide a Graphical Program that will allow the user to input a number in either binary, decimal or hexadecimal. Depending on which field is filled in, fill in the other two with the corresponding values in the other systems.

Use the Big Integer class in order to handle large values. You may limit the values to 10 trillion if desired.

NOTE: Although the Integer class has some great methods like toBinaryString and toHexString, these are not to be used on this assignment.

Project Name	Number Converter
Class 1 Name	ConvertFrame
Class 2 Name	ConvertLogic