Binary/Hex COW

Complete the following methods in the BinaryFun Class. In these methods, the numbers are stored as an array of digits with the least signifigant digit stored at index 0 and the most significant stored at index length-1. Binary numbers are stored as an array of booleans. Hexademical numbers are stored as an array of chars. So

```
boolean [] binaryValues = {false, false, true, false, true};
```

would translate to `10100`

```
char [] hexValues = {'3', 'A', 'E', '7', '8'};
```

would translate to `87EA3`

Level 1

Name: `convertBinaryToDecimal`
Input: `boolean [] binaryValues`
Output: `int number`
Action: converts a binary number to a decimal number

Level 2

Name: `convertHexadecimalToDecimal`
Input: `char [] hexValues`
Output: `int number`
Action: converts a hexadecimal number to a decimal number

Level 3

Name: `addBinary`
Input: `boolean [] binaryOne, boolean [] binaryTwo`
Output: `boolean [] binarySum`
Action: adds the binary values in binaryOne and binaryTwo and returns the sum in binarySum. You may assume that binaryOne and binaryTwo are the same length. You should make binarySum one digit longer.

Level 4

Name: `addHexadecimal`
Input: `char [] hexOne, char [] hexTwo`
Output: `char [] hexSum`
Action: adds the hexadecimal values in hexOne and hexTwo and returns the sum in hexSum. You may assume that hexOne and hexTwo are the same length. You should make hexSum one digit longer.

Level 5

Name: `convertBinaryToHex`
Input: `boolean [] binary`
Output: `char [] hex;`
Action: converts a binary number to a hexadecimal String.

Level 6

Name: `convertDecimalToBinary`
Input: `int decNumber`
Output: `boolean [] binaryValues`
Action: converts a decimal number to a binary number

Name: `convertDecimalToHexadecimal`
Input: `int decNumber`
Output: `char [] hexValues`
Action: converts a decimal number to a hexadecimal number