

```
* One algorithm for converting a decimal number to hexadecimal is as follows:  
*  
* while (the decimal number is not 0) {  
*   the hexadecimal representation = the character in the HEX string that has an index equal  
to the remainder of the decimal number divided by 16  
* + the hexadecimal representation of the number  
*   the decimal number = the decimal number / 16  
* }
```

```
String hexNumber = "";  
if (decimalNumber <= 0)  
{  
    return hexNumber;  
}  
while(decimalNumber != 0)  
{  
    hexNumber = HEX.charAt(decimalNumber % 16) + hexNumber;  
    decimalNumber = decimalNumber / 16;  
}  
return hexNumber;
```

```
* One algorithm for converting a hexadecimal number to decimal is as follows:  
*  
*  
* for (int i = 0; i < length of the input string; i++) {  
*   the decimal number = 16 * the decimal number + the index of the character in the HEX  
string that is equal to the character in the input string at index i  
* }
```