

decToHexStr

Write a C function decToHexStr() that takes in two parameters on a string *str* and a decimal integer *num*, converts *num* into its equivalent hexadecimal number (i.e. with base value of 16), stores it into the string *str* and returns *str* to the calling function using call by reference.

A sample program template is given below:

```
#include <stdio.h>
#include <string.h>
void decToHexStr(char *str, int num);
int main()
{
    int num,i;
    char str[20];
    printf("Enter a decimal number: \n");
    scanf("%d",&num);
    decToHexStr(str,num);
    printf("decToHexStr(): %s\n",str);
    return 0;
}
void decToHexStr(char *str, int num)
{
    /* Write your code here */
}
```

Some test input and output sessions are given below:

(1) Test Case 1

Enter a decimal number:
5
decToHexStr(): 5

(2) Test Case 2

Enter a decimal number:
30
decToHexStr(): 1E

**p2 is a char and with number assigned to it, follow ascii*

(3) Test Case 3

Enter a decimal number:
100
decToHexStr(): 64

*char *p2 = 48 => '0'
char *p2 = 55 => 'A'*

(4) Test Case 4

Enter a decimal number:
300
decToHexStr(): 12C

swap first and last term

```
void decToHexStr(char *str, int num)
{
    int j,i,len;
    char *p2;
    char temp;

    p2=str;
    while (num>0) {
        j=num%16;
        if (j<10)
            *p2=j+48;
        else
            *p2=j+55;
        num=num/16;
        p2++;
    }
    *p2='\0';
    len=strlen(str);
    for (i=0; i<len/2; i++) {
        temp=*(str+i);
        *(str+i)=*(str+len-i-1);
        *(str+len-i-1)=temp;
    }
}
```