

### PROBLEM STATEMENT:

Write X86/64 ALP to convert 4-digit Hex number into its equivalent BCD number and 5-digit BCD number into its equivalent HEX number. Make your program user friendly to accept the choice from user for: (a) HEX to BCD b) BCD to HEX (c) EXIT. Display proper strings to prompt the user while accepting the input and displaying the result. (Wherever necessary, use 64-bit registers).

### SAMPLE OUTPUTS

#### 1. FFFF(HEX) ----> 65535(BCD)

```
Write X86/64 ALP to convert
    a) 4-digit Hex number into its equivalent BCD number and
    b) 5-digit BCD number into its equivalent HEX number.
Nikhil, 3232
```

```
Choose from the following -->
    1. Hexadecimal to BCD
    2. BCD to Hexadecimal
    3. Exit
Your Choice :: 1
```

```
Enter Hexadecimal Number --> FFFF
Equivalent BCD number is --> 65535
```

```
Choose from the following -->
    1. Hexadecimal to BCD
    2. BCD to Hexadecimal
    3. Exit
Your Choice :: 2
```

```
Enter BCD number for conversion --> 65535
Equivalent Hexadecimal number is --> FFFF
```

```
Choose from the following -->
    1. Hexadecimal to BCD
    2. BCD to Hexadecimal
    3. Exit
Your Choice :: 1
```

2. 007B(HEX) ----> 00123(BCD)

Choose from the following -->

1. Hexadecimal to BCD
2. BCD to Hexadecimal
3. Exit

Your Choice :: 1

Enter Hexadecimal Number --> 007B

Equivalent BCD number is --> 00123

Choose from the following -->

1. Hexadecimal to BCD
2. BCD to Hexadecimal
3. Exit

Your Choice :: 2

Enter BCD number for conversion --> 00123

Equivalent Hexadecimal number is --> 007B

Choose from the following -->

1. Hexadecimal to BCD
2. BCD to Hexadecimal
3. Exit

Your Choice :: 3