

**STA Online Computer Programming Contest (DWITE)  
February 2003**

**Problem 5**

**BASE CONVERTER**

It is necessary to convert a number from one base to another. Only bases 2 to 16 will be used in the conversion. Numbers can contain the digits 0 through 9 and the upper-case letters A through F.

The input file (DATA5) will contain five lines of data. Each line of data will contain three numbers, each separated by a space. The first number will be the number in the base that you are converting from. The first number will never have more than 7 digits. The second number is the base that you are converting from. The third number is the base that you are converting to.

The output file (OUT5) will contain five lines of data corresponding to each of the input lines. Each line will contain the value of the converted number.

**Sample Input (Three lines only)**

```
2201110 3 12
2D1A 15 2
EFB3 16 15
```

**Sample Output**

```
1193
10010111100100
132AD
```