

Write a program to convert numbers from base 10 into a base specified by the user. The user may specify any base from 2 through 10. Your program should print an error message and stop if any other base is specified. The digits of the converted number should be printed in reverse order, one digit per line. Use the C “for” statement for your loop. Read the binary number using a statement similar to the following.

```
scanf(“%d”,&MyVar);
```

Replace “MyVar” with the name of your variable. Don’t forget the ampersand (&) in front of your variable name, or you will get very weird results. You should prompt the user for the values using a statement similar to the following.

```
printf(“Enter the base: ”);
```

Note that there is no \n at the end of the message. You can halt your program by executing the following statement.

```
exit(0);
```

A sample program interaction is the following.

```
diablo: prog1  
Enter the base: 2  
Enter the number: 100  
0  
0  
1  
0  
0  
1  
1  
diablo:
```

Extra Credit: Print the digits out in *forward* order on a *single* line.

Turn In: A print-out of the source code.