

1. Write a program that asks the user to input a series of lines. Once the user enters a control-D (if they're on a Unix/Linux host) or control-c (if they're on a Windows host), the program will output the lines the user entered, but it in reverse order from the order the lines were input.

2. Write a program that asks the user to enter a list of strings on separate lines. Then the program prints out a header line that is 40 characters long. The line should look like this:

```
0123456789012345678901234567890123456789
```

Next, the program should print out the strings that the user input, and print them out right-justified in a 25-character wide field.

3. Write a program that creates an array containing 20 integers using the code below:

```
my $i = 1;
my @array;

while ($i++ <= 20) {
    my $random_number = int(rand(20)) + 1;
    push @array, $random_number;
}
```

The program should then print out the 20 column header below:
12345678901234567890

Lastly, the program should print out each number from the array in a right-justified field that is the width of the number.

Hint: the format string to printf can be any expression.

```
$format = 7;
printf "%${format}d\n", 100;
```