Ex 1:

Ask the user what hour of the day it is.

If the hour is between 6 and 9 (inclusive).  
-Ask if they want eggs or they want cereal for breakfast.  
-If they want eggs, generate a response based upon eggs, otherwise ask which cereal they want.

If the hour is between 11 and 13 (inclusive)  
-Ask if they want pizza or a sandwhich for lunch.  
-If they want pizza, ask for the toppings, otherwise tell them what kind of sandwhich they get.

If the hour is between 17 and 20 (inclusive)  
-Ask if they want pasta or soup for dinner.  
-If pasta, ask what kind of sauce, otherwise tell them the soup.

If the hour does not match, then add code to handle a snack selection like above.

Ex 2:

Summary: Loops for factorials.  
  
Write a program that finds the factorial for a given sequence of integers.  
Ask the user for the starting value, then ask the user for the ending value.  
  
Starting at the first number entered, display the factorial calculation and the result of the calculation on a line. Do this for each value from the first number to the last number entered. The factorial of a number n is = n \* (n-1) \* (n-2) \* (n-3) ... \* 1. Where the factorial of 0 is equal to 1. IE 5! = 5\*4\*3\*2\*1 = 120  
  
Sample Execution:  
  
Welcome to the factorial calculator  
Enter the lower bound: 4  
Enter the upper bound: 7  
  
Calculating...  
4! = 4 \* 3 \* 2 \* 1 = 24  
5! = 5 \* 4 \* 3 \* 2 \* 1 = 120  
6! = 6 \* 5 \* 4 \* 3 \* 2 \* 1 = 720  
7! = 7 \* 6 \* 5 \* 4 \* 3 \* 2 \* 1 = 5040  
  
Goodbye.

Ex3:

Summary: Arithmetic, variables and arrays.

1. Prompt the user for how many numbers they want to enter.
2. Load the numbers into an array or list.  (The numbers might be floating point.)
3. Print the numbers entered back to the user, followed by the average, median and sum.
4. Find the average value, the median value and the sum.

The average is the sum divided by the count of the numbers, the median is the value that occurs in the middle, if we have an even count of numbers, such as 10, then the the median is the average of the two middle values. For greater detail about finding the median see [MathIsFun](http://www.mathsisfun.com/median.html" \o "Median" \t "_new).

Example Execution:

How many numbers do you want to enter? 10

Enter number 1: 22.1  
Enter number 2: 4  
Enter number 3: 41  
Enter number 4: 14  
Enter number 5: 24.2  
Enter number 6: 19  
Enter number 7: 25  
Enter number 8: 46  
Enter number 9: 79  
Enter number 10: 9

You entered 22.1, 4, 41, 14, 24.2, 19, 25, 46, 79, 9.  
The average is 28.33.  
The median is 23.15.  
The sum is 283.3.