PART I a)

This piece of code first declare num as a NaN. This allows the while loop to execute. Inside this while loop, the program will prompt the user to enter a positive number, assign it to a variable called temp, then convert it to a number and store it in num. If the resulting num is not a number, or if it is less than 0, then the program will loop back and not exit the while loop. It will only exit when the user has entered a positive number.

PART I b)

1) This code fragment will print out the following in the HTML document:

5<br>10<br>15<br>20<br>25<br>30<br>35<br>40<br>45<br>50<br> (I didn't use a new line for each break because it would take up too much space in this document submission)

2) This piece will do the same thing as the above, except it will not print out 50<br> since the condition is i<50.

3) Code fragment A will accomplish the task neater. It is easier to keep track of where the i variable is at when you have it in the for loop declaration.

PART I c)

Hello Loops!

Hello Loops!

PART II a)

var grade = Number(prompt("Please enter your numeric average:"));

while(isNaN(grade) || grade < 0 || grade == "") {

if (grade == 0) {

break;

}

alert("You have entered an invalid number.");

grade = Number(prompt("Please enter your numeric average:"));

}

while(grade != 0) {

if(grade > 73) {

console.log("Your grade is satisfactory.");

} else if(grade < 73) {

console.log("Your grade is unsatisfactory.");

} else {

alert("You have entered an invalid number.");

}

grade = Number(prompt("Please enter your numeric average:"));

}

PART II b)

var num = Number(prompt("Please enter a number:"));

while(isNaN(num)) {

num = Number(prompt("Please enter a number:"));

}

while(num > 0 || num == 0) {

var sum = 1;

for(var i = 2; i <= num; i++) {

sum \*= i;

}

console.log(sum);

num = Number(prompt("Please enter a number:"));

}

PART II c)

Declare sum = 0 instead of just sum. Add number++ inside the do while loop.