1. Given a number. Print "odd" if the number is odd and "even" if it's even.

| Input | Output |
|-------|--------|
| 123 | "odd" |
| 35 | "odd" |
| 70 | "even" |

2. Given two numbers print 1 if one of them is divisible by the other one, otherwise print 0.

| Input | Output |
|-------|--------|
| 3, 14 | 0 |
| 18, 2 | 1 |
| 7, 21 | 1 |

3. Given number n (positive integer). Print the value of n + nn + nnn (not multiplication).

| Input | Output |
|-------|-----------|
| 3 | 369 |
| 17 | 173451 |
| 100 | 100200300 |

4. Given a positive integer. Bring the last digit of the number to the beginning. Print the new number. If the last digit of the inserted number is 0, number remains the same.

| Input | Output |
|-------|--------|
| 367 | 736 |
| 1002 | 2100 |
| 250 | 250 |
| 8 | 8 |

5. Given five numbers as input. Calculate and print the average of the numbers(without using arrays).

| Input | Output |
|--------------------|--------|
| 45, -12, 0, 3, -15 | 4.2 |
| 7, 52, -23, 9, -81 | -7.2 |

6. Given three numbers. Sort them by the ascending order.

| Input | Output |
|--------------|--------------|
| 45 , 26, 78 | 26, 45, 78 |
| -23, -456, 0 | -456, -23, 0 |

7. Find the sign of product of three numbers **without** multiplication operator. Display the specified sign.

| Input | Output |
|-----------|------------|
| -14, 5, 0 | "unsigned" |
| -8, 9, -6 | "+" |
| 4, 19, -2 | <u>"</u> " |

8. Input three numbers a, b, c respectively, where a is a non zero number and write a program to solve quadratic equations: $ax^2 + bx + c = 0$. (Hint: use Math.pow or Math.sqrt).

| Input | Output |
|----------|------------------------|
| 1, 2, 1 | "Solution is -1" |
| 0, 4, -5 | "Enter valid constans" |

| 3, -8, 12 | "Solution does not exists" |
|-----------|----------------------------|
| 5, -13, 6 | "Solutions are 0.6 and 2" |

9. Given the following code rewrite it using only two *if* operators. (*Hint:* use logical operators).

```
var n = +prompt();

var i = 0;
var j = 0;

if (n % 2 === 0) {
   if (!Math.floor(n / 10)) {
      i += 1;
   }
}

if (n % 3 === 0) {
   if (n % 10 === 1) {
      j += 1;
   }
}
```

10. Insert a digit and a number. Check whether the digits contains in the number or not.

| Input | Output |
|----------|--------|
| 5, 2463 | 'No' |
| 4, 6 | 'No' |
| 8, 45689 | 'Yes' |

11. Enter a number. Reverse its first and last digits. Print the new number.

| Input | Output |
|--------|--------|
| 2 | 2 |
| 13 | 31 |
| 895796 | 695798 |

12. Write a program which will compute the area of a rectangular or a triangle after prompting the user to type the name of the figure name. Also check that entered numbers are positive.

For the triangle entered numbers are height and and base.

| Input | Output |
|-------------------|---------------------------------|
| "triangle", 6, 7 | "Square of the triangle is 21" |
| "rectangle", 8, 5 | "Square of the rectangle is 40" |
| "triangle", 0, 5 | "Please enter only positives" |

13. (***) Enter a number. Find the difference between its biggest and smallest digits.

| Input | Output |
|---------|--------|
| 5 | 0 |
| 152 | 4 |
| 4593653 | 6 |