**Assignment on Problem Solving**

**Problem No 01:**

**Link:** <https://www.codewars.com/kata/523b4ff7adca849afe000035>

Make a simple function called greet that returns the most-famous "hello world!".

**Solution code past here:**

void main() {

print(greet());

}

String greet() {

return 'hello world!';

}

**Problem No 02:**

**Link:**  [**https://www.codewars.com/kata/5899dc03bc95b1bf1b0000ad**](https://www.codewars.com/kata/5899dc03bc95b1bf1b0000ad)

**Solution code past here:**

Given a set of numbers, return the additive inverse of each. Each positive becomes negatives, and the negatives become positives.

void main() {

print(invert([1, 2, 3, 4, 5]));

print(invert([1, -2, 3, -4, 5]));

print(invert([]));

}

List<int> invert(List<int> numbers) {

return numbers.map((n) => -n).toList();

}

**Problem No 03:**

**Link:**  <https://www.codewars.com/kata/58649884a1659ed6cb000072>

You're writing code to control your town's traffic lights. You need a function to handle each change from green, to yellow, to red, and then to green again.

**Solution code past here:**

void main() {

String updateLight(String current) {

if (current == 'green') {

return 'yellow';

} else if (current == 'yellow') {

return 'red';

} else if (current == 'red') {

return 'green';

} else {

return 'invalid';

}

}

}

**Problem No 04:**

**Link:**  <https://www.codewars.com/kata/57f780909f7e8e3183000078>

Given a non-empty array of integers, return the result of multiplying the values together in order. Example:

[1, 2, 3, 4] => 1 \* 2 \* 3 \* 4 = 24

**Solution code past here:**

void main() {

int grow(List<int> arr) {

int result = 1;

for (int num in arr) {

result \*= num;

}

return result;

}

}

**Problem No 05:**

**Link:**  [https://www.codewars.com/kata/57a0556c7cb1f31ab3000ad7](%20https:/www.codewars.com/kata/57a0556c7cb1f31ab3000ad7)

Write a function which converts the input string to uppercase.

**Solution code past here:**

void main() {

print(makeUpperCase("imran"));

}

String makeUpperCase(String str) {

return str.toUpperCase();

}

**Problem No 06:**

**Link:**  [**https://www.codewars.com/kata/5715eaedb436cf5606000381**](https://www.codewars.com/kata/5715eaedb436cf5606000381%20)

You get an array of numbers, return the sum of all of the positives ones.

**Solution code past here:**

void main() {}

int positiveSum(List<int> arr) {

int sum = 0;

for (int num in arr) {

if (num > 0) {

sum += num;

}

}

return sum;

}

**Problem No 07:**

**Link:**  [**https://www.codewars.com/kata/5513795bd3fafb56c200049e**](https://www.codewars.com/kata/5513795bd3fafb56c200049e%20)

Create a function with two arguments that will return an array of the first n multiples of x.

Assume both the given number and the number of times to count will be positive numbers greater than 0.

Return the results as an array or list ( depending on language ).

**Solution code past here:**

void main() {}

List<int> countBy(int x, int n) {

List<int> result = [];

for (int i = 1; i <= n; i++) {

result.add(x \* i);

}

return result;

}

**Problem No 08:**

**Link:**   [**https://www.codewars.com/kata/59342039eb450e39970000a6**](https://www.codewars.com/kata/59342039eb450e39970000a6)

Given a number n, return the number of positive odd numbers below n, EASY!

**Solution code past here:**

void main(){}

int oddCount(int n) {

return n ~/ 2;

}

**Problem No 09:**

**Link:**  <https://www.codewars.com/kata/5a00e05cc374cb34d100000d>

Build a function that returns an array of integers from n to 1 where n>0.

**Solution code past here:**

void main(){}

List<int> reverseSeq(int n) {

List<int> result = [];

for (int i = n; i >= 1; i--) {

result.add(i);

}

return result;

}

**Problem No 10:**

**Link:**  <https://leetcode.com/problems/remove-element/description/?envType=problem-list-v2&envId=array>

**Solution code past here:**

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Thanks, by

**TARASOFT SOLUTIONS**