1. A vehicle needs 10 times the amount of fuel than the distance it travels. However, it must always carry a minimum of 100 fuel before setting off.

Create a function which calculates the amount of fuel it needs, given the distance.

**Examples**

calculateFuel(15) ➞ 150

calculateFuel(23.5) ➞ 235

calculateFuel(3) ➞ 100

**Notes**

* Distance will be a number greater than zero.
* Return 100 if the calculated fuel turns out to be less than 100.

1. User created an infinite loop! Help him by fixing the code in the code tab to pass this challenge. Look at the examples below to get an idea of what the function should do.

### Examples

1. PrintArray(1) ➞ [1]
2. PrintArray(3) ➞ [1, 2, 3]
3. PrintArray(6) ➞ [1, 2, 3, 4, 5, 6]

3. Create a function that takes the number of wins, draws and losses and calculates the number of points a football team has obtained so far.

* wins get 3 points
* draws get 1 point
* losses get 0 points

**Examples**

footballPoints(3, 4, 2) ➞ 13

footballPoints(5, 0, 2) ➞ 15

footballPoints(0, 0, 1) ➞ 0

**Notes**

Inputs will be numbers greater than or equal to 0.

4. Create a function that takes two arguments. Both arguments are integers, a and b. Return true if one of them is 10 or if their sum is 10.

### Examples

makesTen(9, 10) ➞ true

makesTen(9, 9) ➞ false

makesTen(1, 9) ➞ true

### Notes

Don't forget to return the result.

5. Create a function that takes two numbers as arguments (num, length) and returns an array of multiples of num until the array length reaches length.

### Examples

arrayOfMultiples(7, 5) ➞ [7, 14, 21, 28, 35]

arrayOfMultiples(12, 10) ➞ [12, 24, 36, 48, 60, 72, 84, 96, 108, 120]

arrayOfMultiples(17, 6) ➞ [17, 34, 51, 68, 85, 102]

### Notes

Notice that num is also included in the returned array.

6. Create a function which simulates the game "rock, paper, scissors". The function takes the input of both players (rock, paper or scissors), first parameter from first player, second from second player. The function returns the result as such:

* "Player 1 wins"
* "Player 2 wins"
* "TIE" (if both inputs are the same)

The rules of rock, paper, scissors, if not known:

* Both players have to say either "rock", "paper" or "scissors" at the same time.
* Rock beats scissors, paper beats rock, scissors beat paper.

**Examples**

rps("rock", "paper") ➞ "Player 2 wins"

rps("paper", "rock") ➞ "Player 1 wins"

rps("paper", "scissors") ➞ "Player 2 wins"

rps("scissors", "scissors") ➞ "TIE"

rps("scissors", "paper") ➞ "Player 1 wins"

7. Write a Program to find employees aged over 50 using ArrayList?

8.Write a Program to find duplicate employees using HashMap?

9. Write a function that reverses a string. **Make your function recursive.**

**Examples**

reverse("hello") ➞ "olleh"

reverse("world") ➞ "dlrow"

reverse("a") ➞ "a"

reverse("") ➞ ""

**Notes**

* For non-base cases, your function must call itself at least once.
* Check the **Resources** tab for info on recursion.