**PROBLEM DESCRIPTION**

Create a function that generates a vector of random integers using inputs provided by the user for how many numbers, and a range (which consists of a higher and lower bound number)

**INPUT AND OUTPUT**

|  |  |
| --- | --- |
| **INPUT** |  |
| Input description | Mechanism |
| How many vectors | Standard input stream |
| Lower bound | Standard input stream |
| Higher bound | Standard input stream |

|  |  |
| --- | --- |
| **OUTPUT** |  |
| Output description | Stream |
| Vector of random numbers | Standard output stream |

**DATA FORM**

|  |  |  |
| --- | --- | --- |
| Identifier | Data type | Description |
| intMany | integer | How many numbers to generate in vector |
| intLow | integer | Lower bound of vector |
| intHigh | integer | Higher bound of vector |
| intRange | integer | Range of values in vector |
| intNum | integer | Ensures vector is within range |
| VenRan | Vector | The numbers generated |

**ALGORITHM**

**PSEUDO CODE**

How many← receive how many values

Lower bound← receive lower bound

Higher bound ← receive higher bound

Range ← higher – lower +1

Numbers← modulus range + Lower bound

Random Numbers ← Numbers

**UML ACTIVITY DIAGRAM**

