Day 4 using C#

- Array
  Is collection of elements in same datatype. It's reference type.
  Sorted in stuck and heap.

  - Declaration and initialization

<datatype> [ ] <arrayname> = new <datatype> [size];
int [ ] ages = new int [3];
ages [0] = 3;
ages[1]= 1;
ages[2]= 2;

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deceleration and initialization in one line:
int [ ]ages = {3, 4, 5} ;

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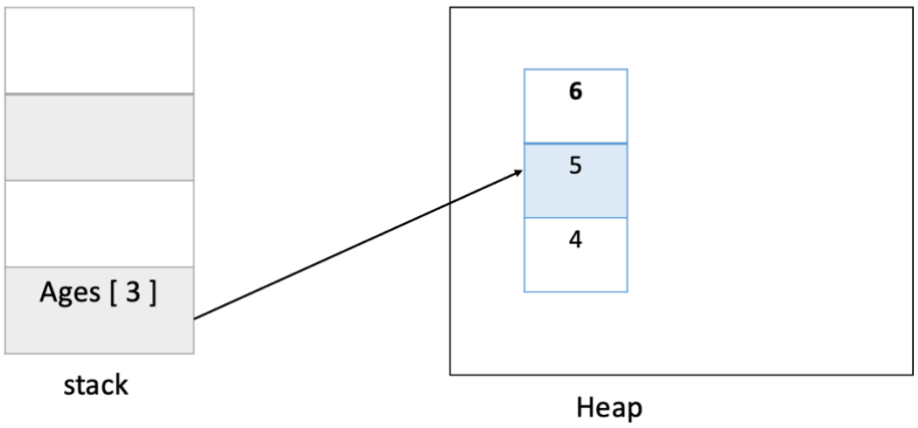
int [ ] ages = new int [3]{3,4,5};



- Multi-Dimensional Array: It's called matrix.

Int [,] ages = new int [2,2];

2 ➔number of rows
2 ➔number of columns

ages[0,0] = 1;
ages[0,1] = 2;
ages[1,0] = 3;
ages[1,1] = 4;

- Jagged Array:

  is an array of arrays. Each row in jagged array is an array. It's not like two-dimensional array, where the length is fixed in two-dimensional array, jagged array allows each row have different length.

int [] [] JaggedArray = new int [3][]; ➔ in initialize array we specify number of row (array), but the length of each array is not fixed.

int num = JaggedArray [0][1];
0 ➔ it means the first array. { 1, 2, 3, 4}
1 ➔ the second element in first array. {2}

So, output: 2

- Array slicing :

  It take sub part form array [from .. to]

- Reversing slicing:

When using reverse slicing that tell compiler to start from the last of array and skip the beginning. So, when compiler see ' ^ ' this operation will start from last. [from .. ^to]