Basic principles of c#, clr

Lab work "Array, Structure, Enum"

MAIN ACADEMY

Lab work contents

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Array, structure, enum - task

- Develop the program, which helps to manage computers in organization. There are 3 types of computers: desktops, laptops, servers.
- Computer parameters:
  - Desktop: CPU - 4 cores, 2,5 HGz, memory - 6 GB, HDD – 500 GB
  - Laptop: CPU - 2 cores, 1,7 HGz, memory - 4 GB, HDD – 250 GB
  - Server: CPU - 8 cores, 3 HGz, memory - 16 GB, HDD – 2 TB
- Organization consist of 4 department. Every department has several computers of different types:
  - 1 department – 2 desktops, 2 laptops, 1 server
  - 2 department – 3 laptops
  - 3 department – 3 desktops, 2 laptops
  - 4 department – 1 desktop, 1 laptop, 2 servers

- Count total number of all computers and computers of every type
- Find computer with the largest storage (HDD)
- Find computer with the lowest productivity (CPU and memory)
- Make desktop upgrade: change memory up to 8

General instructions

- Use template project “CSharp_Net-module1_4–lab”
- Use loops and if-else statements
- Use logical operators in statement conditions
- Use "Debugging" and "Watch“ to check values
- Print all data on the screen

Step 3-4 explanation

- **set the size of every array** in jagged array (number of computers)
- array size is **4**
- **5** (2,2,1), **3** (0,3,0), **5** (3,2,0), **4** (1,1,2))

Step 10 - explanation

- make **desktop upgrade**: change memory up to 8
- **change value of memory** to 8 for every desktop. Don't do it for other computers
- use loops and if-else statements