ICT

Practical work 2

The operating system (OS)

Plan

- Types of OS.
- Create, delete, copy, search folders and files in OS.
- Planning.
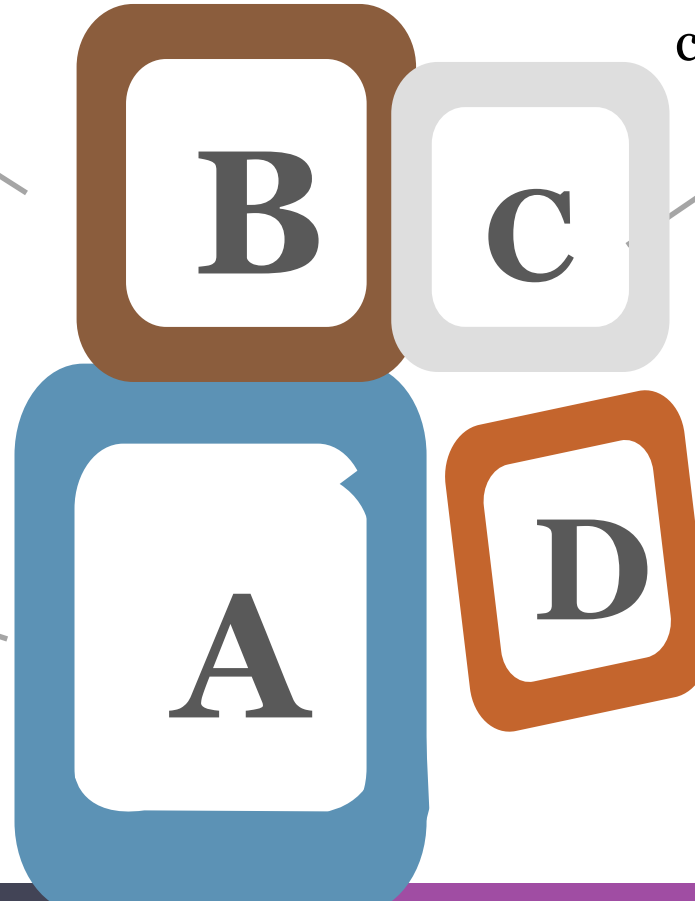- The task Manager.

Vocabulary

1. Operating system
2. Create
3. Delete
4. Copy
5. Folders
6. Manager
7. Planning
8. Communicate
9. System software
10. Application software
11. Command prompt

WHAT IS AN OPERATING SYSTEM

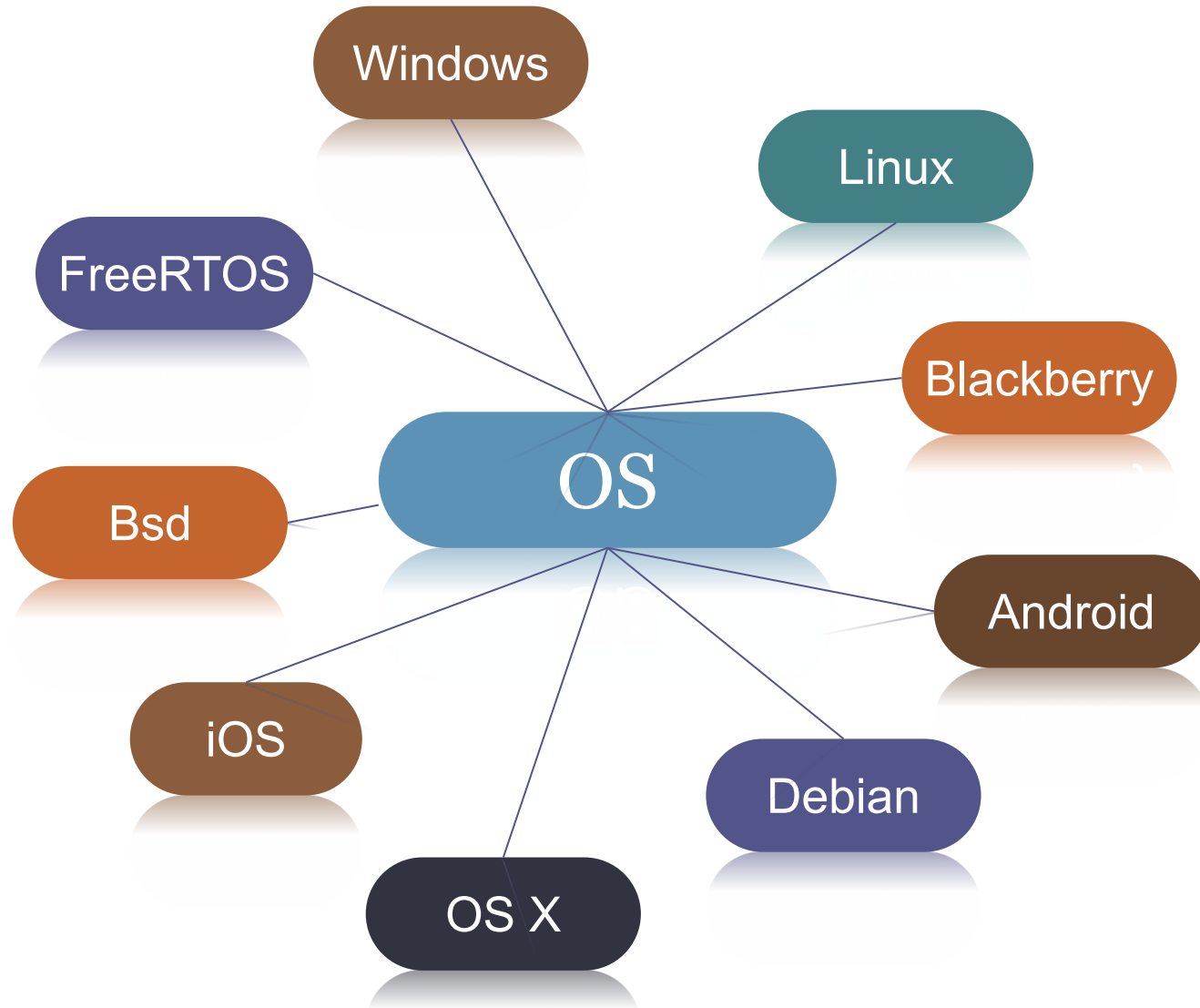It manages the computer's **memory**, **processes**, and all of its **software** and **hardware**

It also allows you to **communicate** with the computer without knowing how to speak the computer's language

An **operating system** is the **most important software** that runs on a computer

The operating system coordinates all of this to make sure each program gets what it needs.

B

C

A

D

MOSTLY USED OPERATING SYSTEMS

Types of software; the Operating System

1. System software controls the basic functions of a computer, e.g. operating systems, programming software and utility programs.
2. Application software lets you do specific jobs such as writing letters, doing calculations, drawing or playing games. Examples are a word processor or a graphics package.

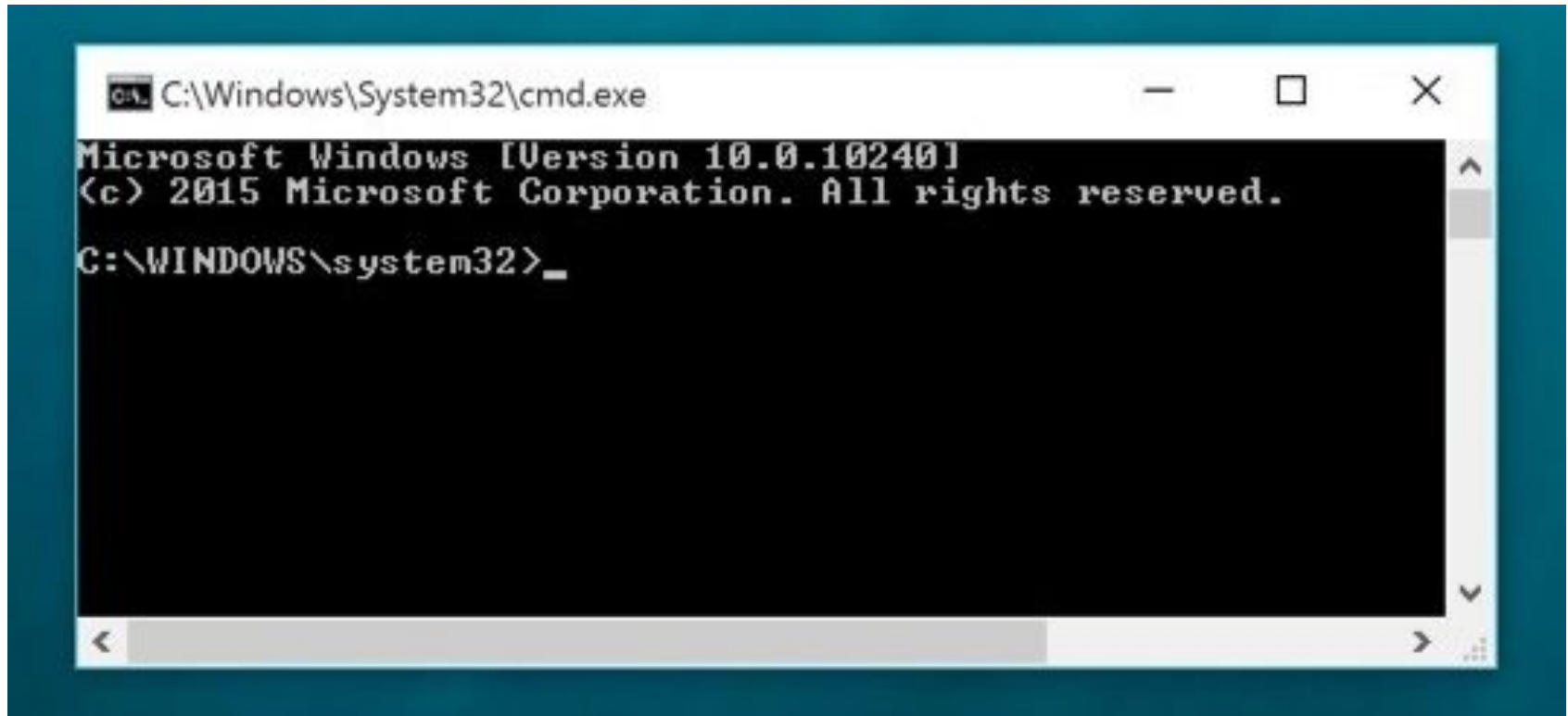# Types of software; the Operating System

❑ the Windows family - designed by Microsoft and used on most PCs
❑ Mac OS - created by Apple and used on Macintosh computers
❑ Unix - found on mainframes and workstations in corporate installations, as it supports multi-users
❑ Linux - developed under the GNU General Public License; anyone can copy its source code, modify and redistribute it. It is used on PCs and in appliances and small devices.

Working with the Command Prompt in Windows 10

Command Prompt is a <u>command line interpreter</u> application available in most Windows <u>operating systems</u>.

Command Prompt is officially called *Windows Command Processor* but is also sometimes called *the command shell* or by its filename *cmd.exe*.

Working with the Command Prompt in Windows 10
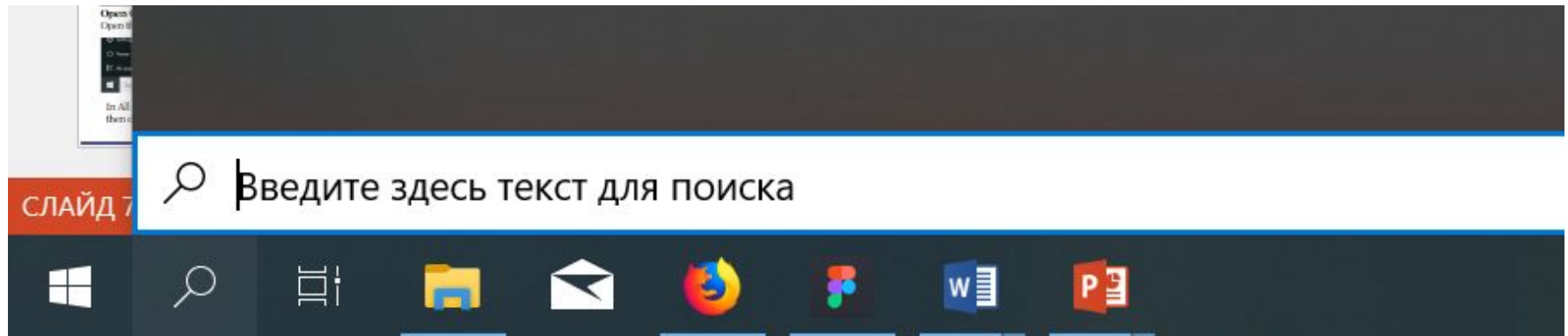
Open Command Prompt from Win+X Power Menu
Press "Win + X", and click/tap on Command Prompt, or Command Prompt (Admin) to open it in Administrator mode.

Working with the Command Prompt in Windows 10

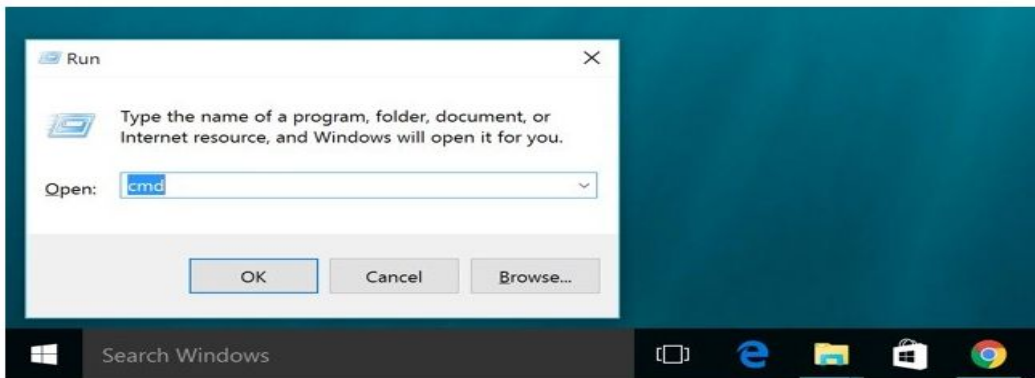**Open Command Prompt from Task Manager**
Type **cmd** or **cmd.exe**, and hit OK to open up a regular command prompt. You can also check the box to open as administrator.

Working with the Command Prompt in Windows 10

Open Command Prompt from Run

Press the "Win + R" key to open RUN dialog box. Type cmd, and click/tap on OK.

Open Command Prompt from All Apps in Start Menu

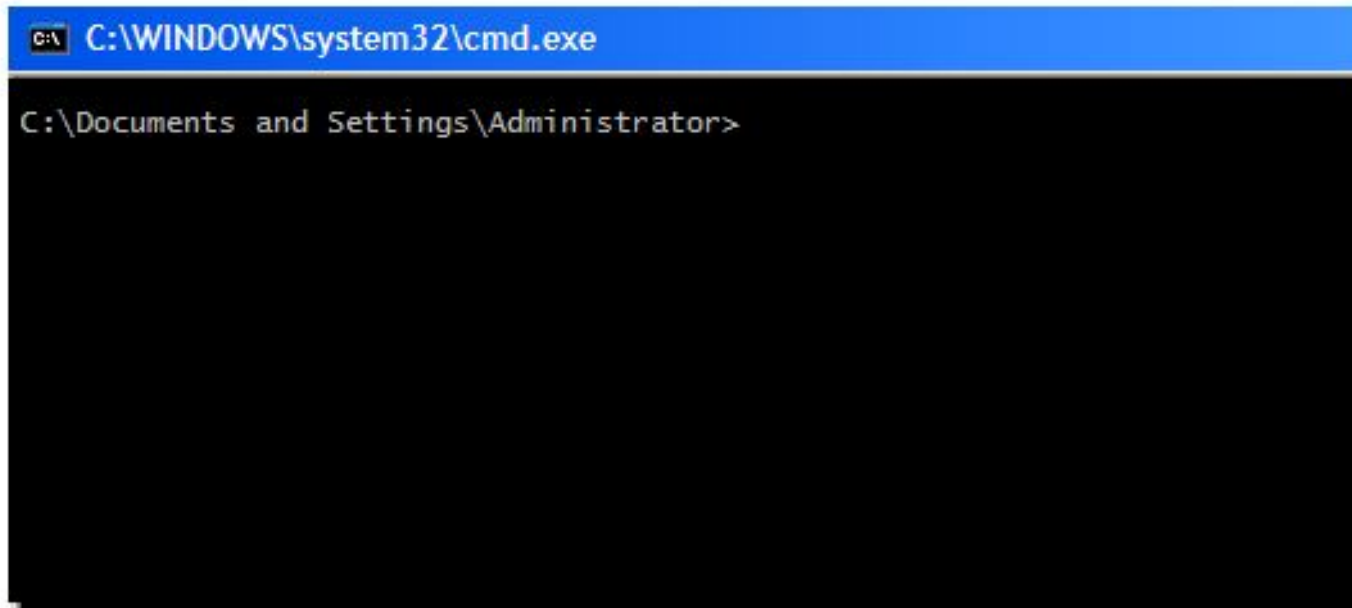Open the Start menu, and click/tap on All apps at the bottom.

In All apps, scroll down and expand the Windows System folder, then click/tap on Command Prompt.

Working with the Command Prompt in Windows 10

All the operations above launch cmd.exe, a window that reminds us of the old days in computer history: pure white text on a uniform black background. Despite its resemblance to a DOS windows, cmd.exe merely is a command line interpreter merely similar to DOS.

Working with the Command Prompt in Windows 10

Main commands:

The **cd** command change director or go to another file

```
C:\Users\Bucky>cd Desktop

C:\Users\Bucky\Desktop>cd ..
```

The **cd..** command means back up

```
C:\Users\Bucky>cd Desktop

C:\Users\Bucky\Desktop>cd ..

C:\Users\Bucky>cd Desktop\Videos

C:\Users\Bucky\Desktop\Videos>cd ../..

C:\Users\Bucky>_
```

The **cd** and \ we can do 2 steps and the **cd..\..** Back up to 2 steps

Working with the Command Prompt in Windows 10

Main commands:

The **dir** command lists the contents of the current <u>dir</u>ectory.

```
C:\Users\Bucky\Desktop>dir
 Volume in drive C has no label.
 Volume Serial Number is 042B-7C91

 Directory of C:\Users\Bucky\Desktop

01/04/2016  05:01 PM    <DIR>          .
01/04/2016  05:01 PM    <DIR>          ..
10/13/2015  03:36 PM        14,757,573 burpsuite_pro_v1.6.28.jar
12/22/2015  05:07 AM    <DIR>          Eric
12/30/2015  02:15 PM    <DIR>          Other
12/30/2015  02:18 PM    <DIR>          Python-Reverse-Shell
01/04/2016  05:41 PM    <DIR>          Slingshot
10/07/2015  09:26 PM    <DIR>          Videos
               1 File(s)     14,757,573 bytes
               7 Dir(s)  48,105,230,336 bytes free
```

By the **dir** command we can see how many folders and files do we have on our desktop

Working with the Command Prompt in Windows 10

Main commands:

The **cls** command to clean your screen.

```
C:\Users\Bucky>cls_
```

The **mkdir** command is to create new folder.
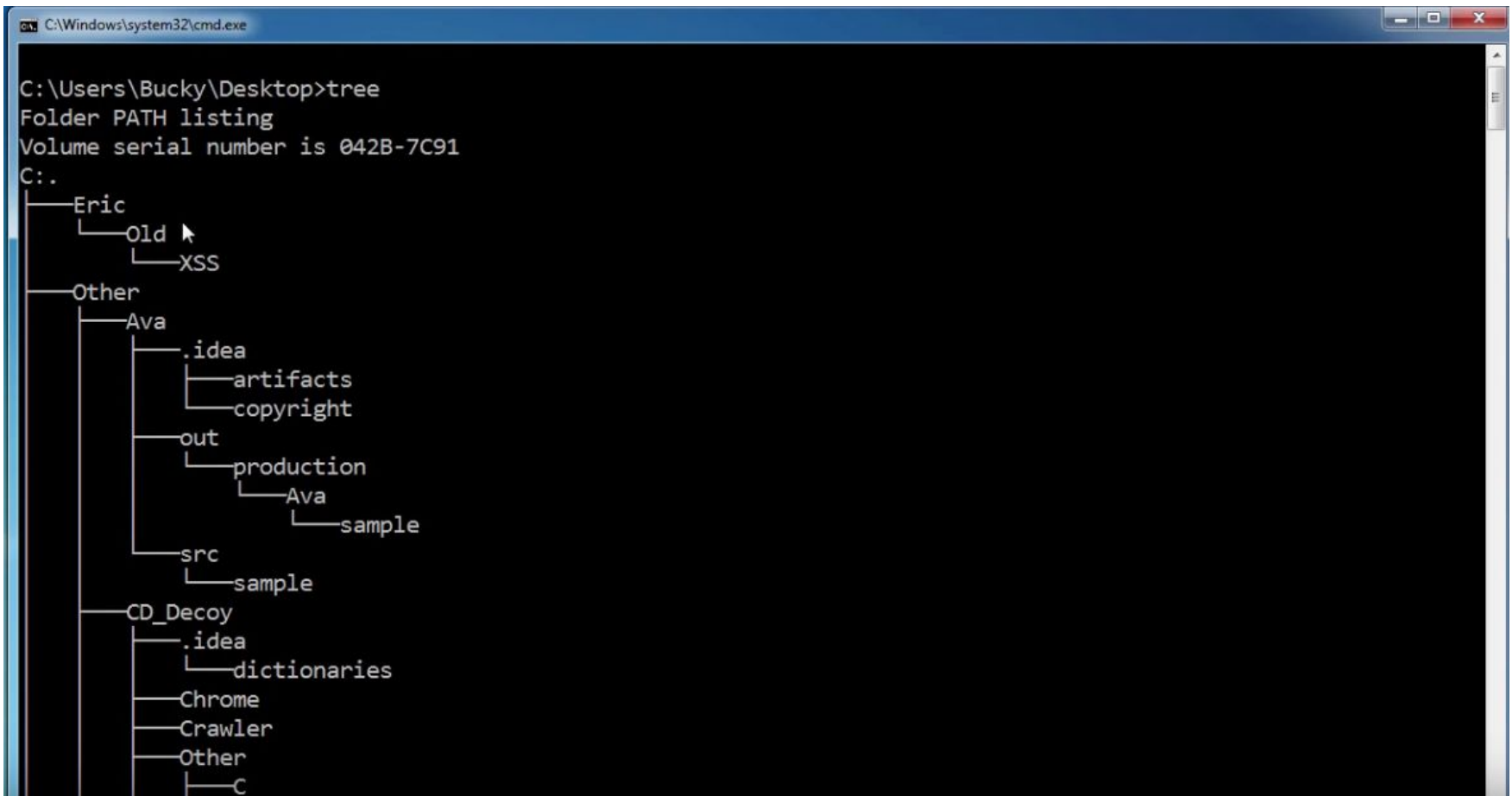The **rmdir** command is to delete any folder.

```
C:\Users\Bucky\Desktop>rmdir Bacon
The directory is not empty.

C:\Users\Bucky\Desktop>rmdir /s Bacon
Bacon, Are you sure (Y/N)?
```

If there are some files in folder that you want to delete
Then you need to write the **rmdir /s** command to remove the folder with the files in it.

Working with the Command Prompt in Windows 10

Main commands:

The **tree** command we can see all folders as a tree.

Working with the Command Prompt in Windows 10

Main commands:


```
Windows Command Line Tutorial - 6 - Drives and Changing Colors
C:\Users>color /?
Sets the default console foreground and background colors.

COLOR [attr]

  attr        Specifies color attribute of console output

Color attributes are specified by TWO hex digits -- the first
corresponds to the background; the second the foreground.  Each digit
can be any of the following values:

    0 = Black       8 = Gray
    1 = Blue        9 = Light Blue
    2 = Green       A = Light Green
    3 = Aqua        B = Light Aqua
    4 = Red         C = Light Red
    5 = Purple      D = Light Purple
    6 = Yellow      E = Light Yellow
    7 = White       F = Bright White
```

Working with the Command Prompt in Windows 10

Main commands:

The **echo** command we can create new file with the written words in it.

```
C:\Users\Диана\Desktop\testfile>echo lalala > di.txt

C:\Users\Диана\Desktop\testfile>type di.txt
lalala

C:\Users\Диана\Desktop\testfile>echo star > di.txt

C:\Users\Диана\Desktop\testfile>type di.txt
star

C:\Users\Диана\Desktop\testfile>echo "is shine" >> di.txt

C:\Users\Диана\Desktop\testfile>type di.txt
star
"is shine"

C:\Users\Диана\Desktop\testfile>
```

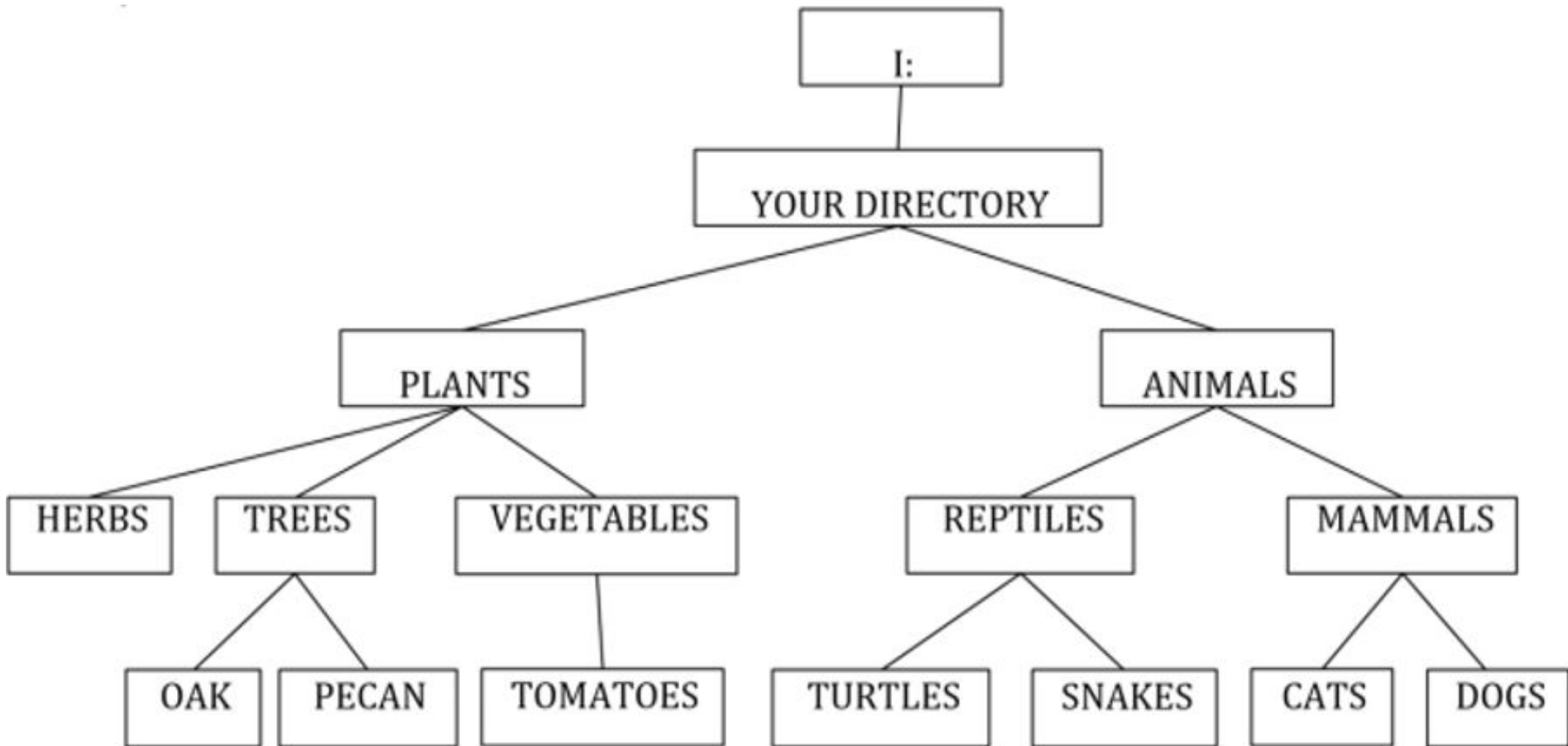**Working with the Command Prompt in Windows 10**

Main commands:

The **ren** or **rename** command to rename your folders and files.

Node.js command prompt

```
C:\Users\Диана\Desktop>rename "testfile" "di"

C:\Users\Диана\Desktop>_
```
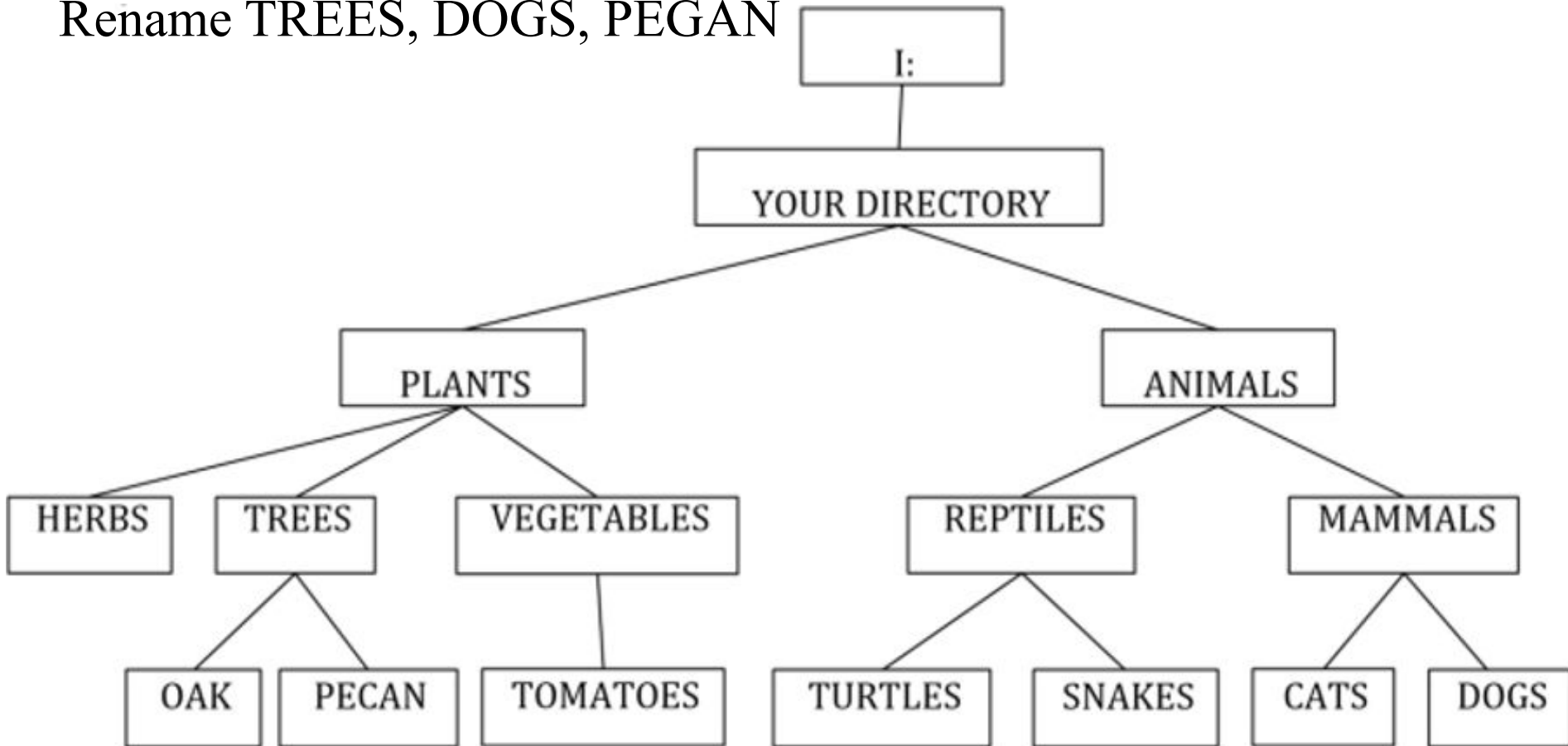
Task 1. Creating subdirectories.

Task 2. Creating subdirectories.
Delete file MAMMALS, OAK, SNAKES
Rename TREES, DOGS, PEGAN

Task 3. Creating subdirectories.
Create new files .txt in Folders HERBS and CATS.