MODERN OPERATING SYSTEMS

LECTURE 3

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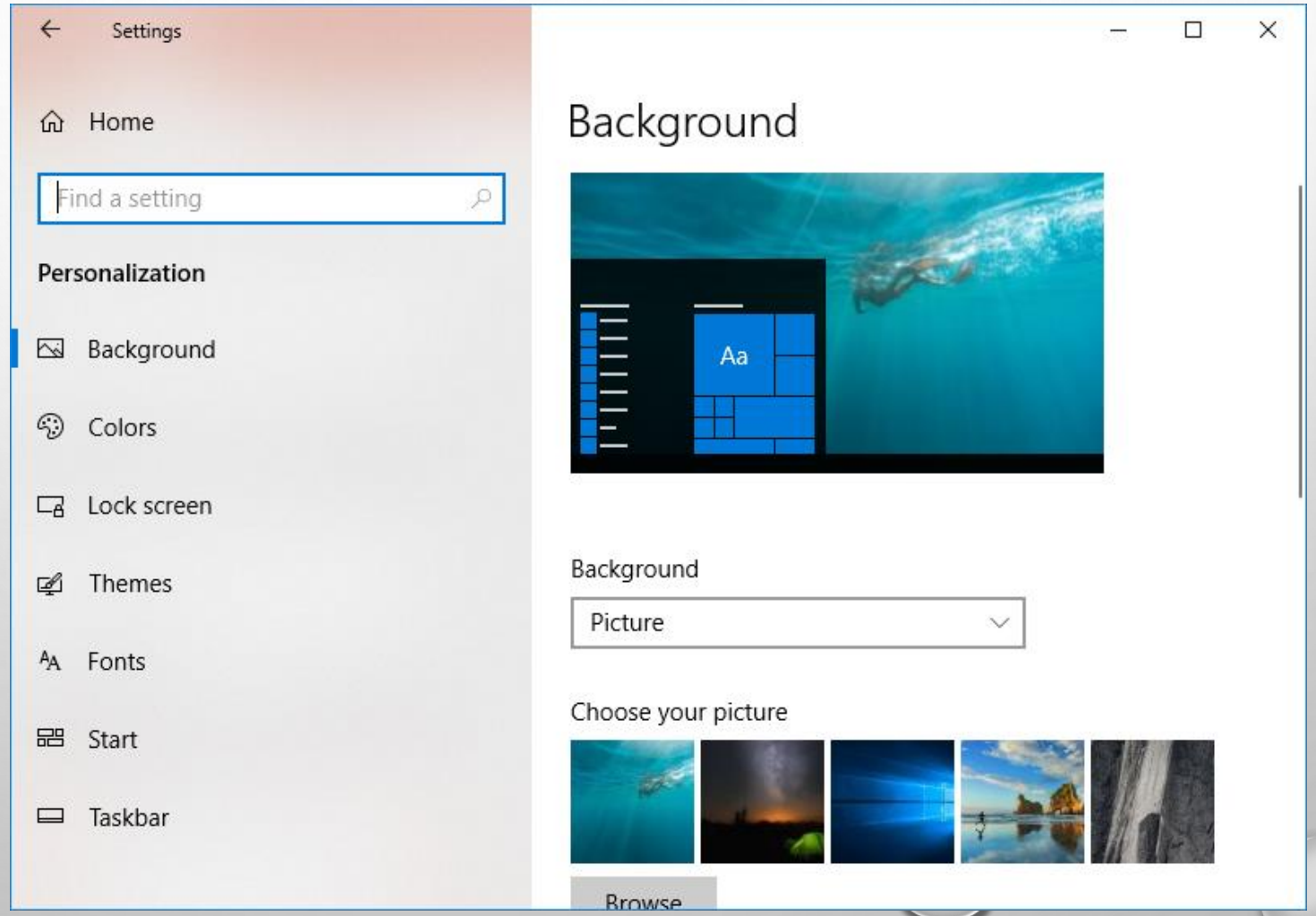
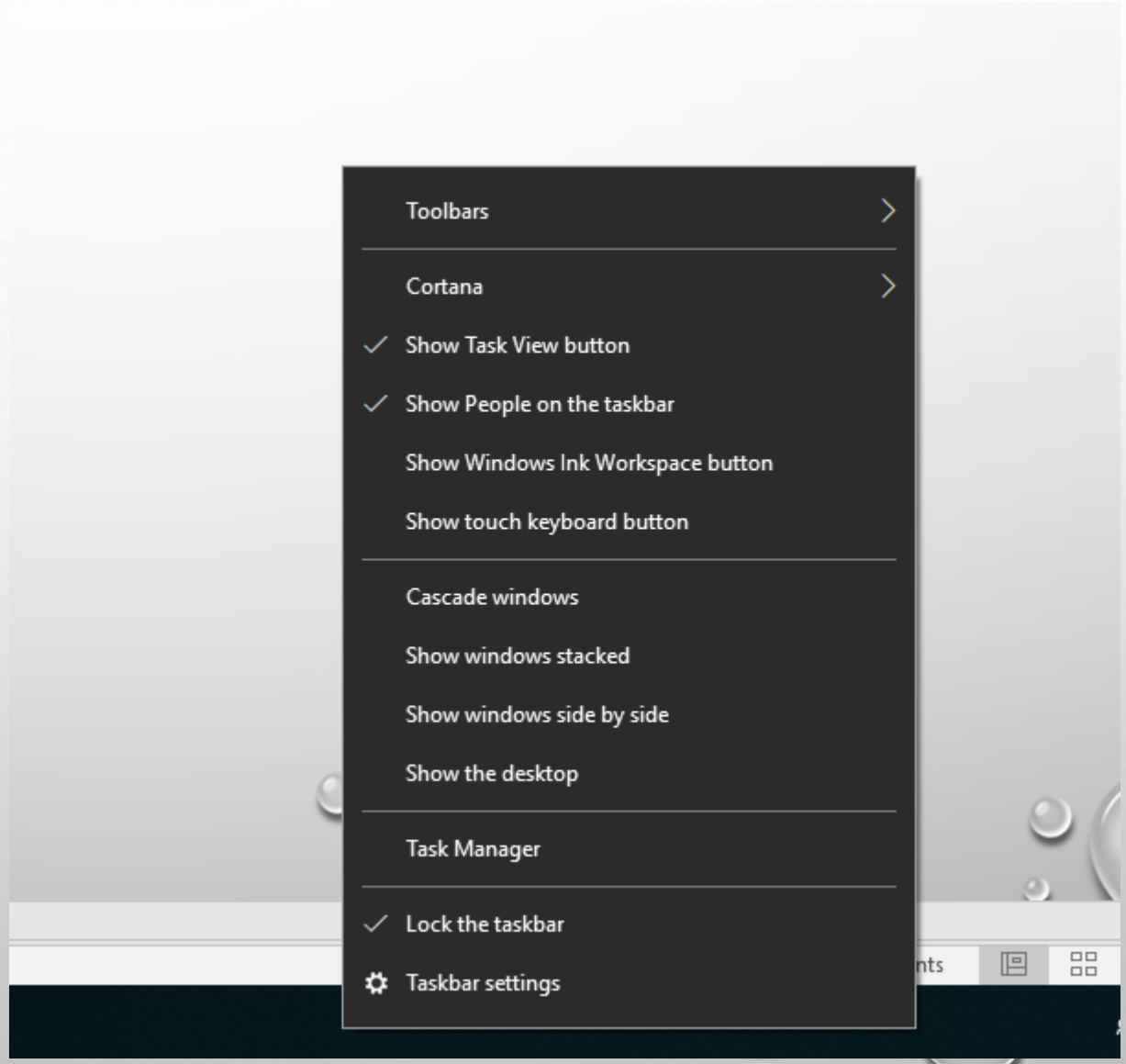
AGENDA

- WORKSPACE SETTINGS
- WINDOWS USER PROFILES
- COMMAND INTERPRETER

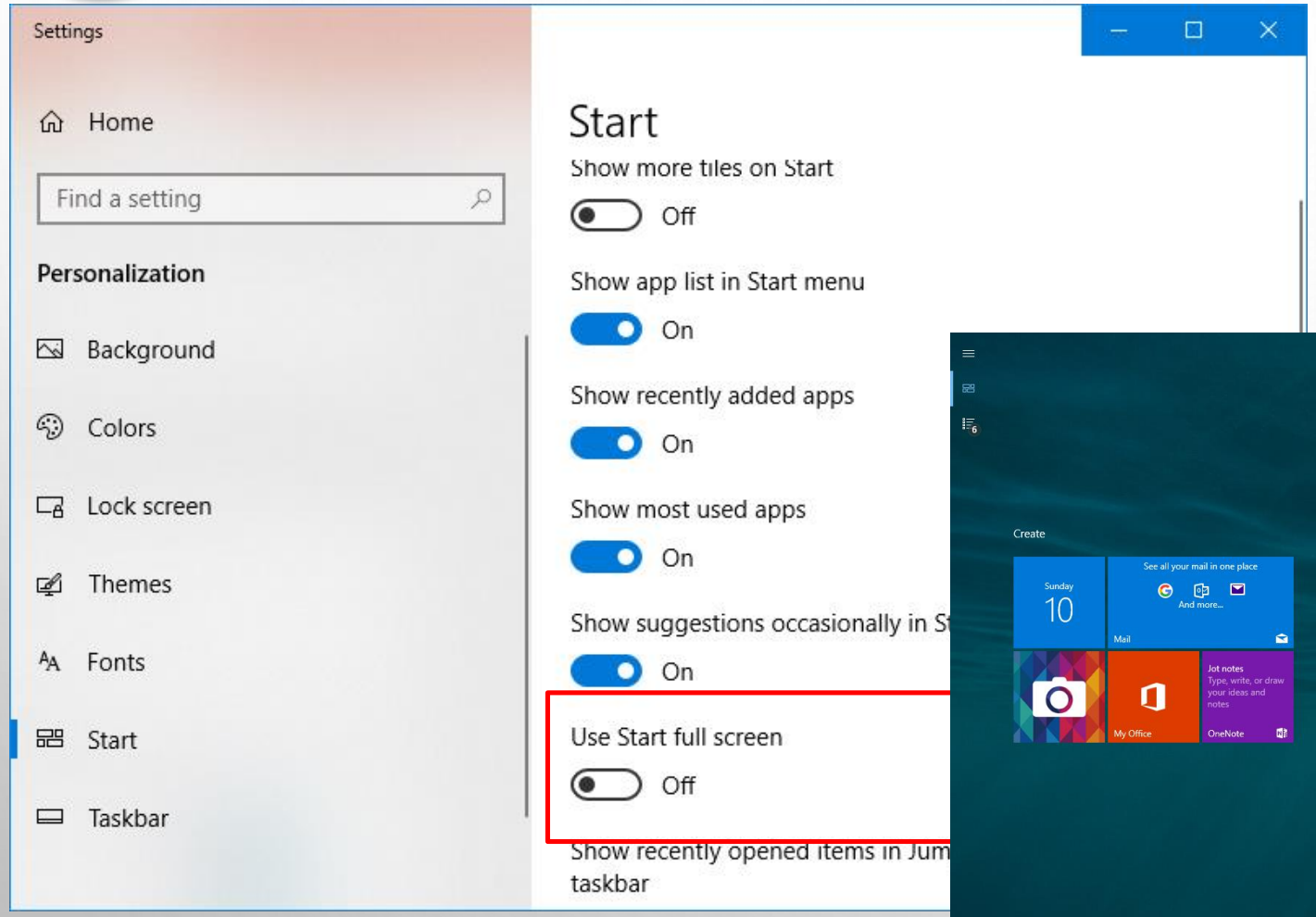
PERSONALIZATION (START MENU\SETTINGS\PERSONALIZATION) (CONTEXTUAL MENU OF DESKTOP(MOUSE RIGHT CLICK IN THE DESKTOP)\PERSONALIZE)

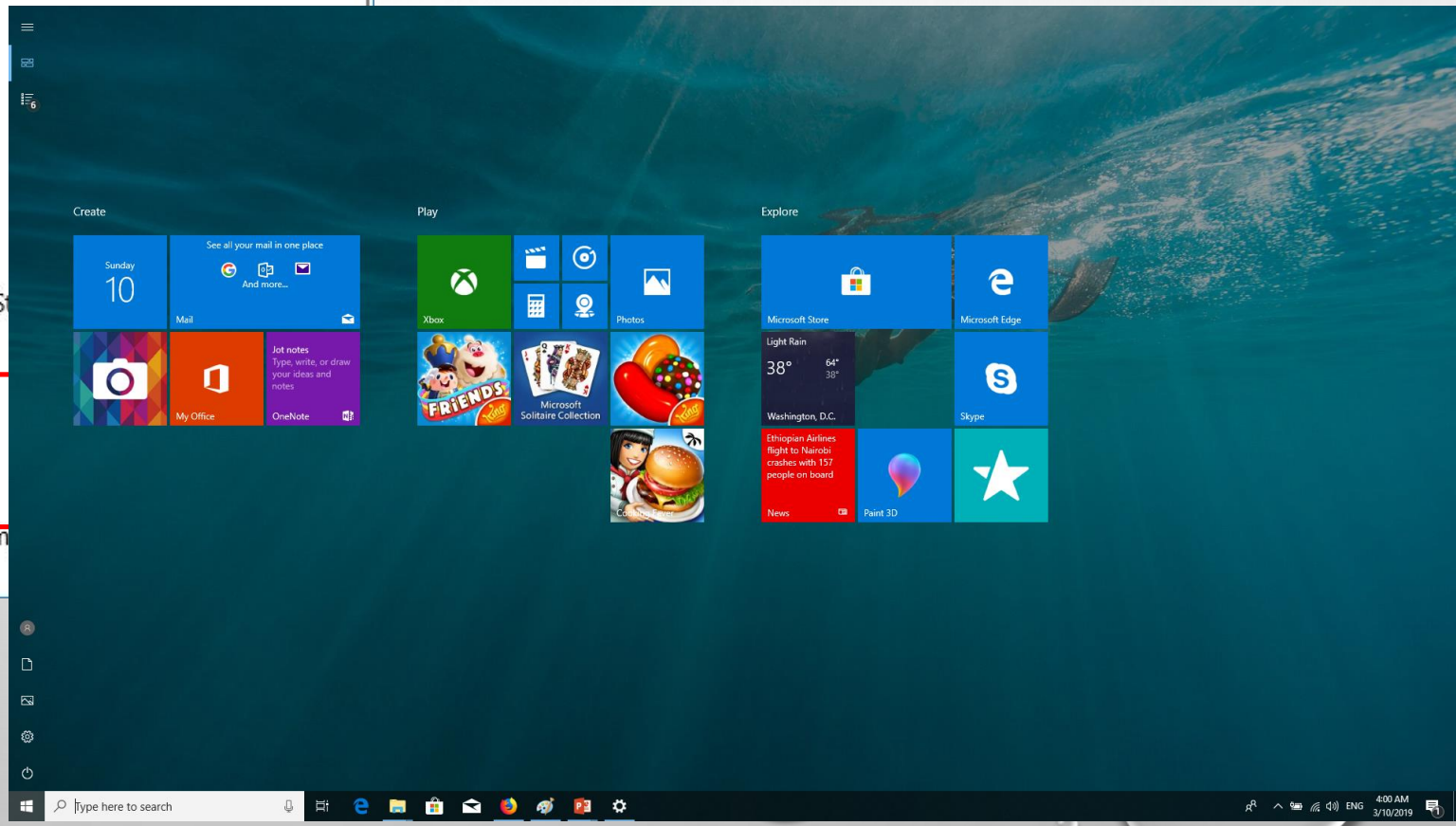


CONTEXTUAL MENU OF THE TASKBAR

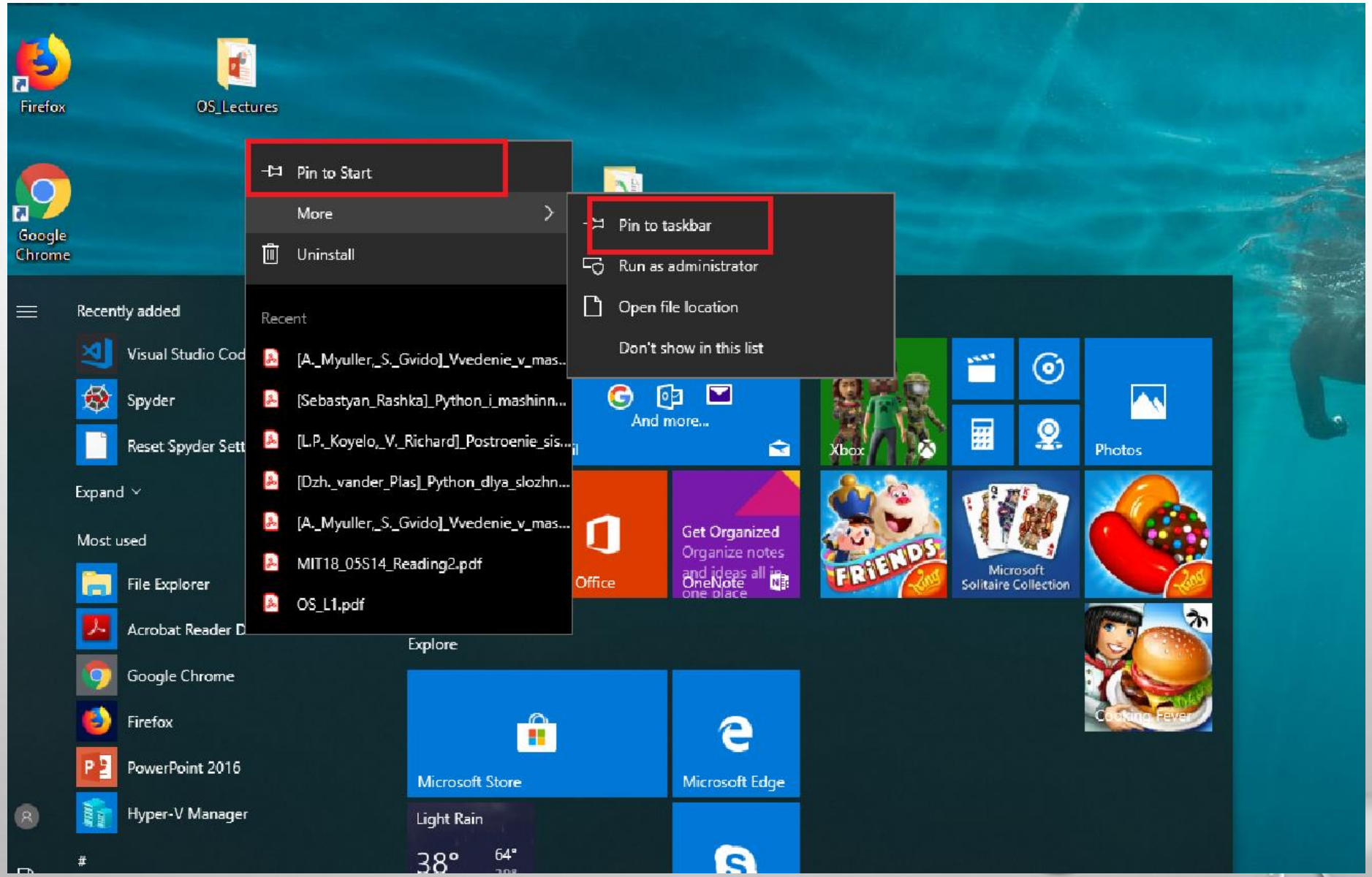


START MENU (MAKE IT AS THE START SCREEN)





START MENU (INTRODUCE NEW APP'S ICON INTO THE START MENU OR INTO THE TASKBAR)



AERO INTERFACE

- WAS INTRODUCED SINCE WINDOWS VISTA (INSTEAD OF WINDOWS XP'S "LUNA" THEME), REVISED IN WINDOWS 7
- IT MEANS:
  - A – AUTHENTIC;
  - E – ENERGETIC
  - R – REFLECTIVE
  - O – OPEN

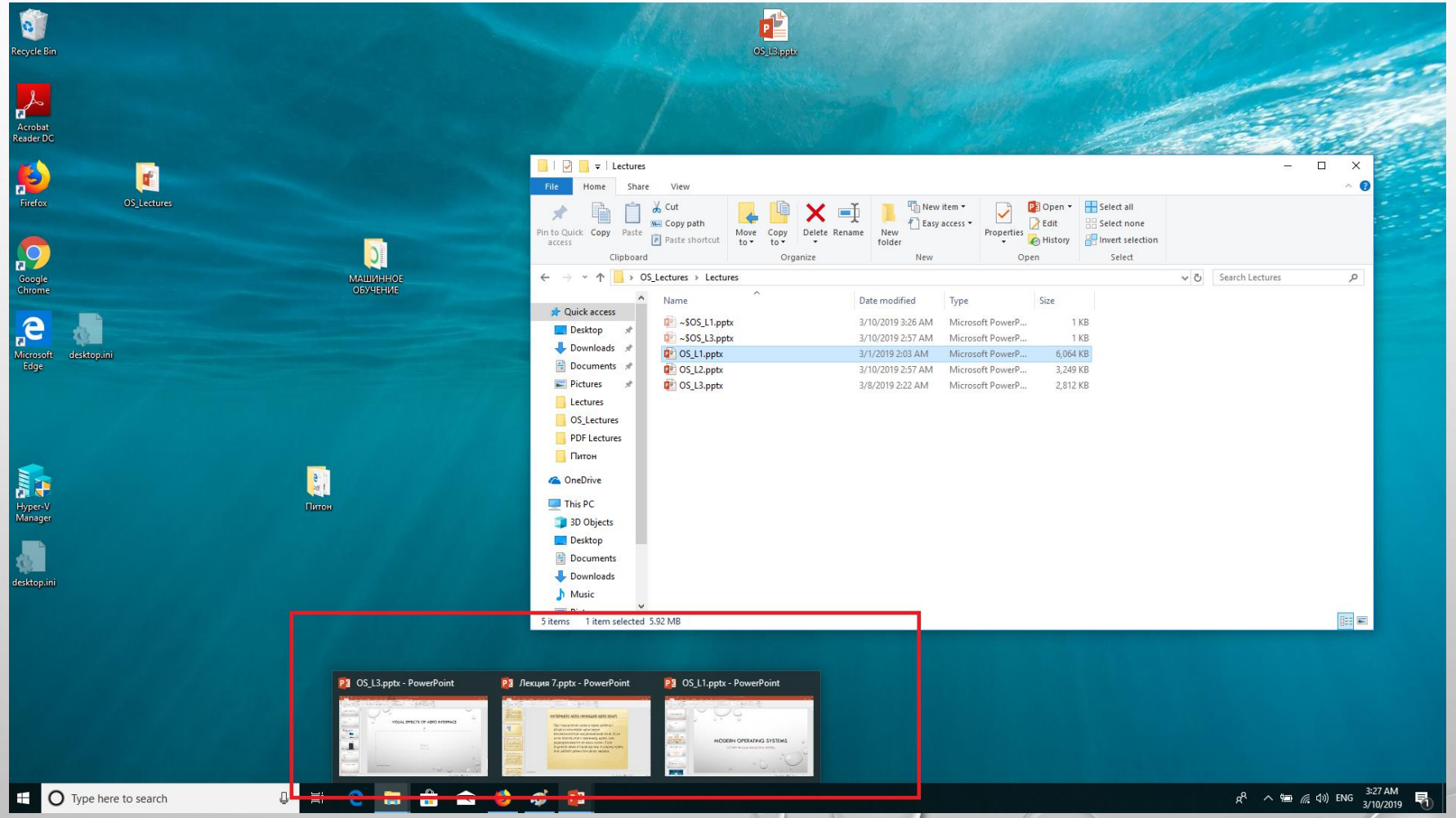
SOME VISUAL EFFECTS FROM AERO

AERO SHAKE: SHAKING (QUICKLY DRAGGING BACK AND FORTH) A WINDOW MINIMIZES ALL OTHER WINDOWS. SHAKING IT AGAIN BRINGS THEM BACK.

AERO PEEK: HOVERING OVER A TASKBAR THUMBNAIL SHOWS A PREVIEW OF THE ENTIRE WINDOW. AERO PEEK IS ALSO AVAILABLE THROUGH THE "SHOW DESKTOP" BUTTON AT THE RIGHT END OF THE TASKBAR, WHICH MAKES ALL OPEN WINDOWS TRANSPARENT FOR A QUICK VIEW OF THE DESKTOP.

AERO SNAP: SNAPPING A WINDOW TO THE TOP OF THE SCREEN MAXIMIZES IT.

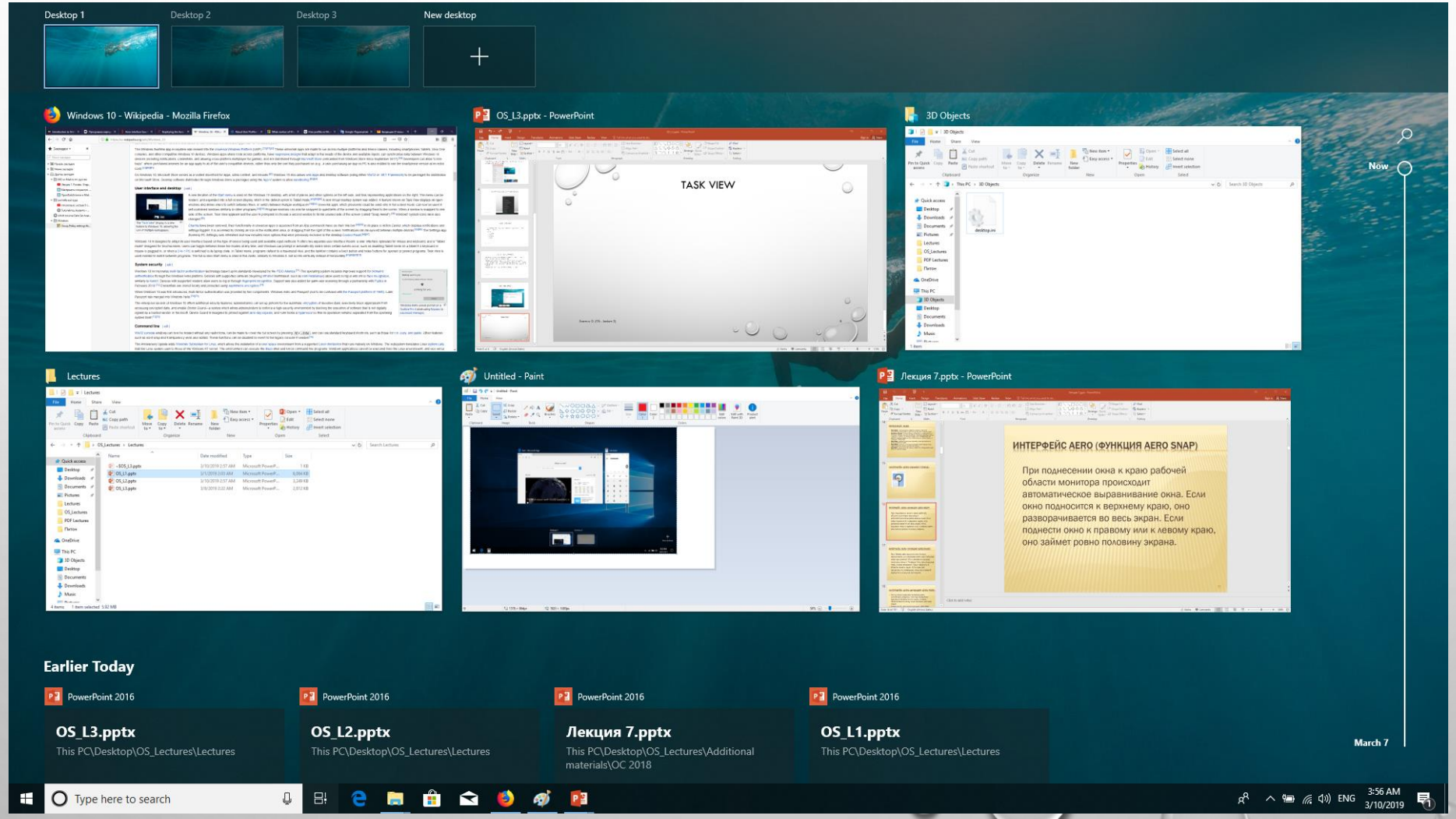
AERO PEEK EFFECT



TASK VIEW

- APPEARS ON “WIN+TAB” CLICK
- NEW VIEW FOR WINDOWS 10
- ONE MAY HAVE SEVERAL DESKTOPS

TASK VIEW (WIN+TAB)



USER PROFILE

- FROFILE OF THE USER IS A STRUCTURED SET OF FILES AND FOLDERS WITH THE PREDETERMINED NAMES WHERE SETTINGS ASSOCIATED WITH THIS USER ARE STORED
- THE SYSTEM CREATES A USER PROFILE THE FIRST TIME THAT THIS USER LOGS ON TO A COMPUTER. AT SUBSEQUENT LOGONS, THE SYSTEM LOADS THE USER'S PROFILE, AND THEN OTHER SYSTEM COMPONENTS CONFIGURE THE USER'S ENVIRONMENT ACCORDING TO THE INFORMATION IN THE PROFILE.
- USER PROFILES PROVIDE THE FOLLOWING ADVANTAGES:
  - ✓ WHEN THE USER LOGS ON TO A COMPUTER, THE SYSTEM USES THE SAME SETTINGS THAT WERE IN USE WHEN THE USER LAST LOGGED OFF.
  - ✓ WHEN SHARING A COMPUTER WITH OTHER USERS, EACH USER RECEIVES THEIR CUSTOMIZED WORKPLACE AFTER LOGGING ON.
  - ✓ SETTINGS IN THE USER PROFILE ARE UNIQUE TO EACH USER. THE SETTINGS CANNOT BE ACCESSED BY OTHER USERS. CHANGES MADE TO ONE USER'S PROFILE DO NOT AFFECT OTHER USERS OR OTHER USERS' PROFILES.
  - ✓ ADMINISTRATIVE USER CAN COPY ONE PROFILE FOR ANOTHER USER TO MAKE THE SIMILAR WORKPLACE FOR THEM, OR EVEN TO DISTRIBUTE IT TO OTHER COMPUTERS

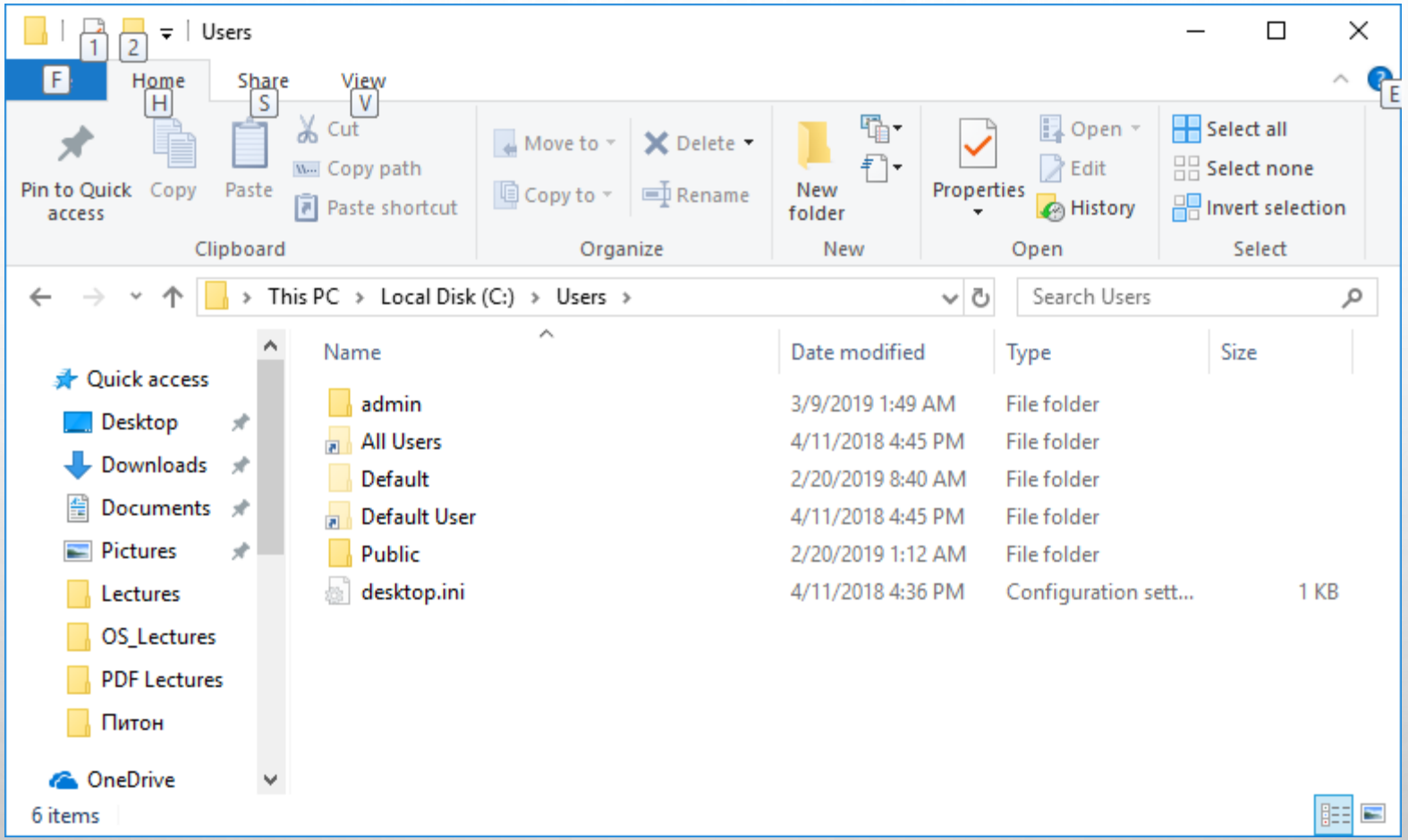
TYPES OF USER PROFILES

- **LOCAL USER PROFILES**. A LOCAL USER PROFILE IS CREATED THE FIRST TIME THAT A USER LOGS ON TO A COMPUTER. THE PROFILE IS STORED ON THE COMPUTER'S LOCAL HARD DISK. CHANGES MADE TO THE LOCAL USER PROFILE ARE SPECIFIC TO THE USER AND TO THE COMPUTER ON WHICH THE CHANGES ARE MADE.
- **ROAMING USER PROFILES**. A ROAMING USER PROFILE IS A COPY OF THE LOCAL PROFILE THAT IS COPIED TO, AND STORED ON, A SERVER SHARE. THIS PROFILE IS DOWNLOADED TO ANY COMPUTER THAT A USER LOGS ONTO ON A NETWORK. CHANGES MADE TO A ROAMING USER PROFILE ARE SYNCHRONIZED WITH THE SERVER COPY OF THE PROFILE WHEN THE USER LOGS OFF. THE ADVANTAGE OF ROAMING USER PROFILES IS THAT USERS DO NOT NEED TO CREATE A PROFILE ON EACH COMPUTER THEY USE ON A NETWORK.
- **MANDATORY USER PROFILES**. A MANDATORY USER PROFILE IS A TYPE OF PROFILE THAT ADMINISTRATORS CAN USE TO SPECIFY SETTINGS FOR USERS. ONLY SYSTEM ADMINISTRATORS CAN MAKE CHANGES TO MANDATORY USER PROFILES. CHANGES MADE BY USERS TO DESKTOP SETTINGS ARE LOST WHEN THE USER LOGS OFF.
- **TEMPORARY USER PROFILES**. A TEMPORARY PROFILE IS ISSUED EACH TIME THAT AN ERROR CONDITION PREVENTS THE USER'S PROFILE FROM LOADING. TEMPORARY PROFILES ARE DELETED AT THE END OF EACH SESSION, AND CHANGES MADE BY THE USER TO DESKTOP SETTINGS AND FILES ARE LOST WHEN THE USER LOGS OFF. TEMPORARY PROFILES ARE ONLY AVAILABLE ON COMPUTERS RUNNING WINDOWS 2000 AND LATER.

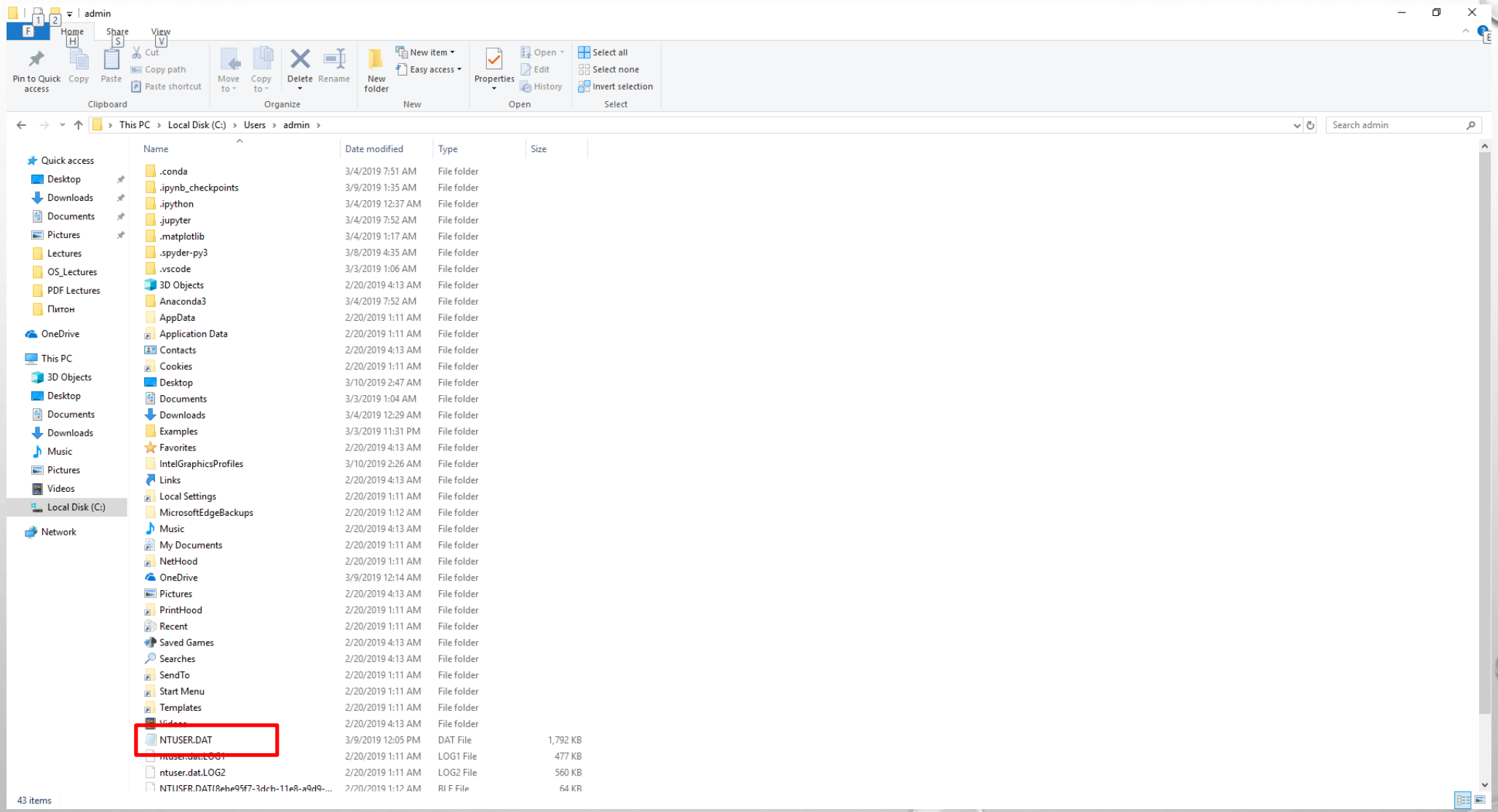
PROFILE STRUCTURE

- A SET OF PROFILE FOLDERS STORED IN THE FILE SYSTEM. USER-PROFILE FILES ARE STORED IN THE SPECIAL DIRECTORY (%SYSTEMDRIVE%\USERS), ON A FOLDER PER-USER BASIS. WINDOWS EXPLORER USES THE USER-PROFILE FOLDERS EXTENSIVELY FOR SUCH ITEMS AS THE USER'S DESKTOP, **START** MENU AND **DOCUMENTS** FOLDER.
- A REGISTRY HIVE. THE REGISTRY HIVE IS THE FILE **NTUSER.DAT**. THE HIVE IS LOADED BY THE SYSTEM AT USER LOGON, AND IT IS MAPPED TO THE **HKEY_CURRENT_USER** REGISTRY KEY. THE USER'S REGISTRY HIVE MAINTAINS THE USER'S REGISTRY-BASED PREFERENCES AND CONFIGURATION.

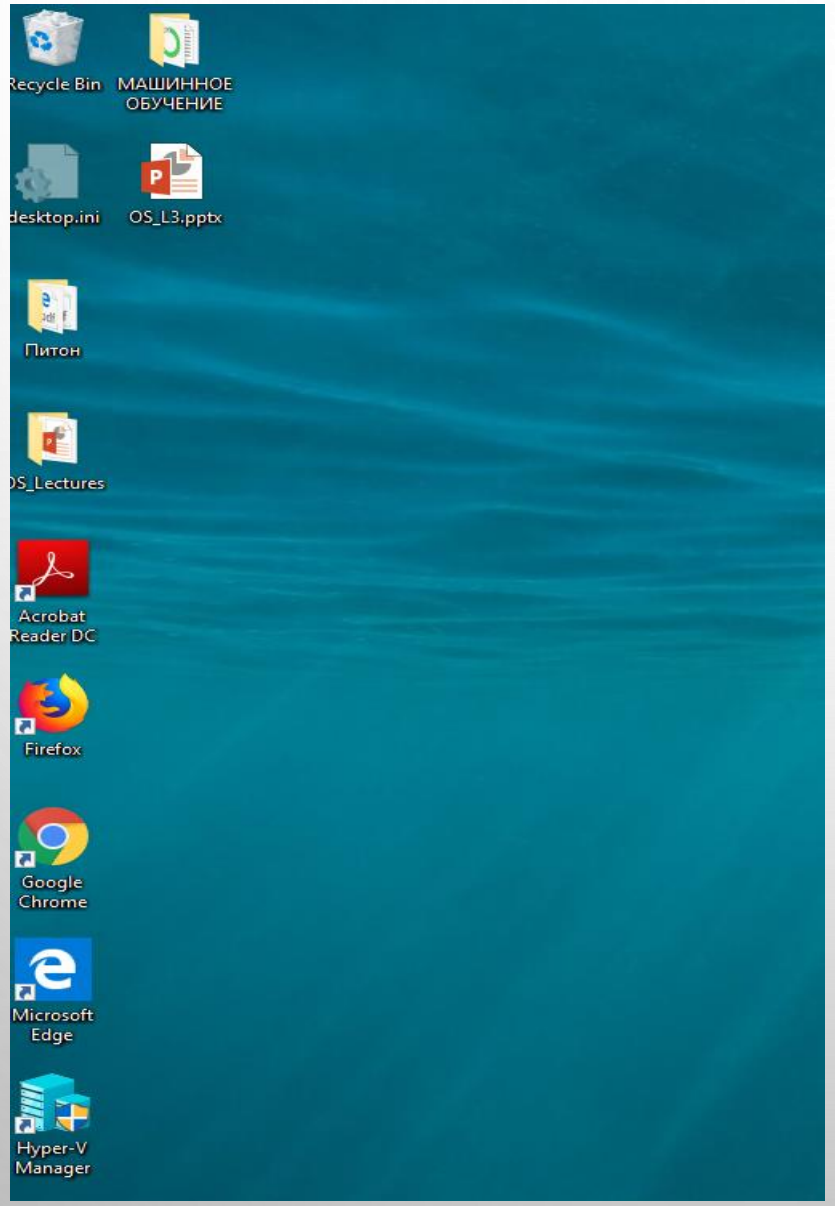
%SYSTEMDRIVE%\USERS

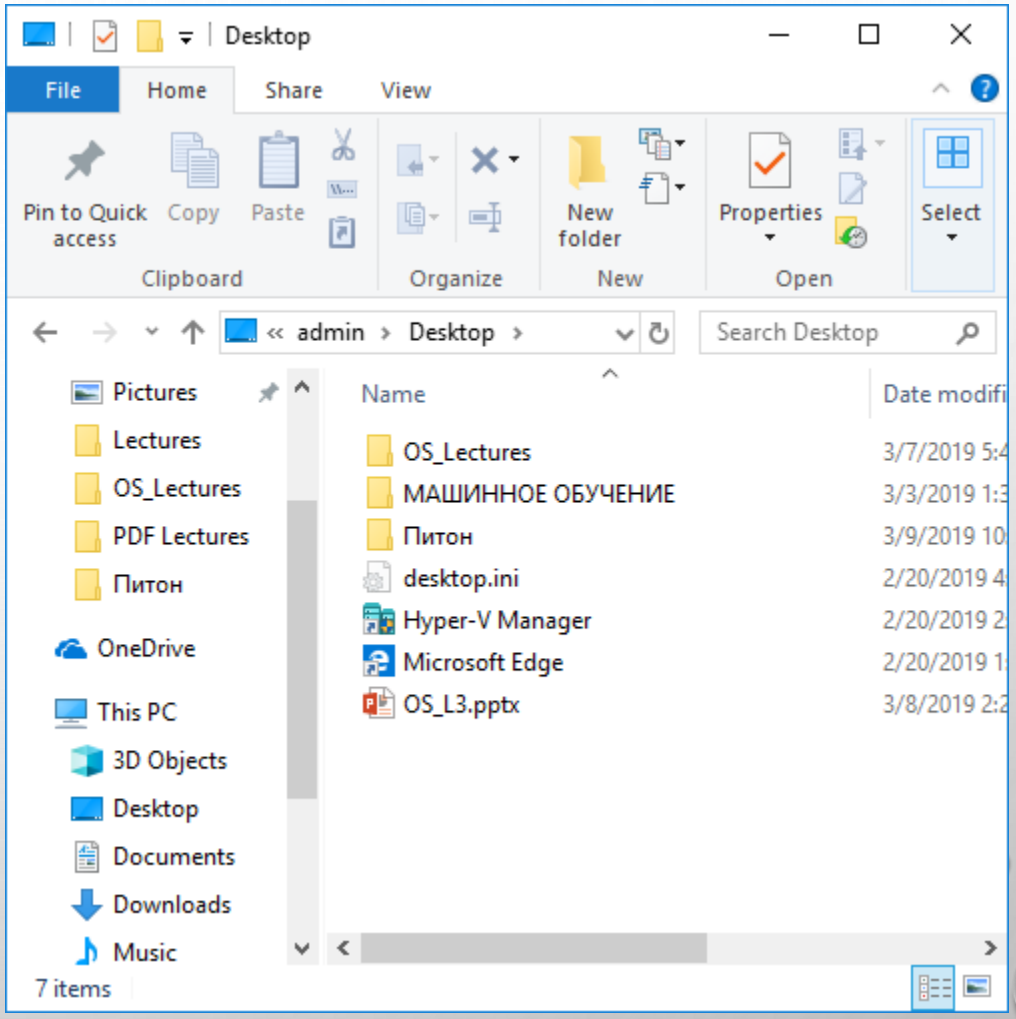


LOCAL USER PROFILE STRUCTURE



EXAMPLE OF PROFILE RELEVANCE





PROFILES

- EVERY LOCAL USER PROFILE IS CREATED WHILE THEIR FIRST LOGON BY MEANS OF “DEFAULT” FOLDER CONTENT COPYING INTO THE FOLDER WITH THE NAME OF THIS USER.
- “DEFAULT” IS A USER PROFILE TEMPLATE FOR EVERY NEW USER
- THERE IS A KIND OF A GROUP PROFILE LOCATED IN THE “PUBLIC” FOLDER, SETTINGS (AND DOCUMENTS) FOR ALL USERS ARE LOCATED HERE
- PROFILES FROM DIFFERENT VERSIONS OF WINDOWS ARE NON COMPATIBLE: ONE CAN NOT COPY PROFILE FROM THE OTHER WINDOWS VERSION (BOTH LATER AND EARLIER) TO USE IT

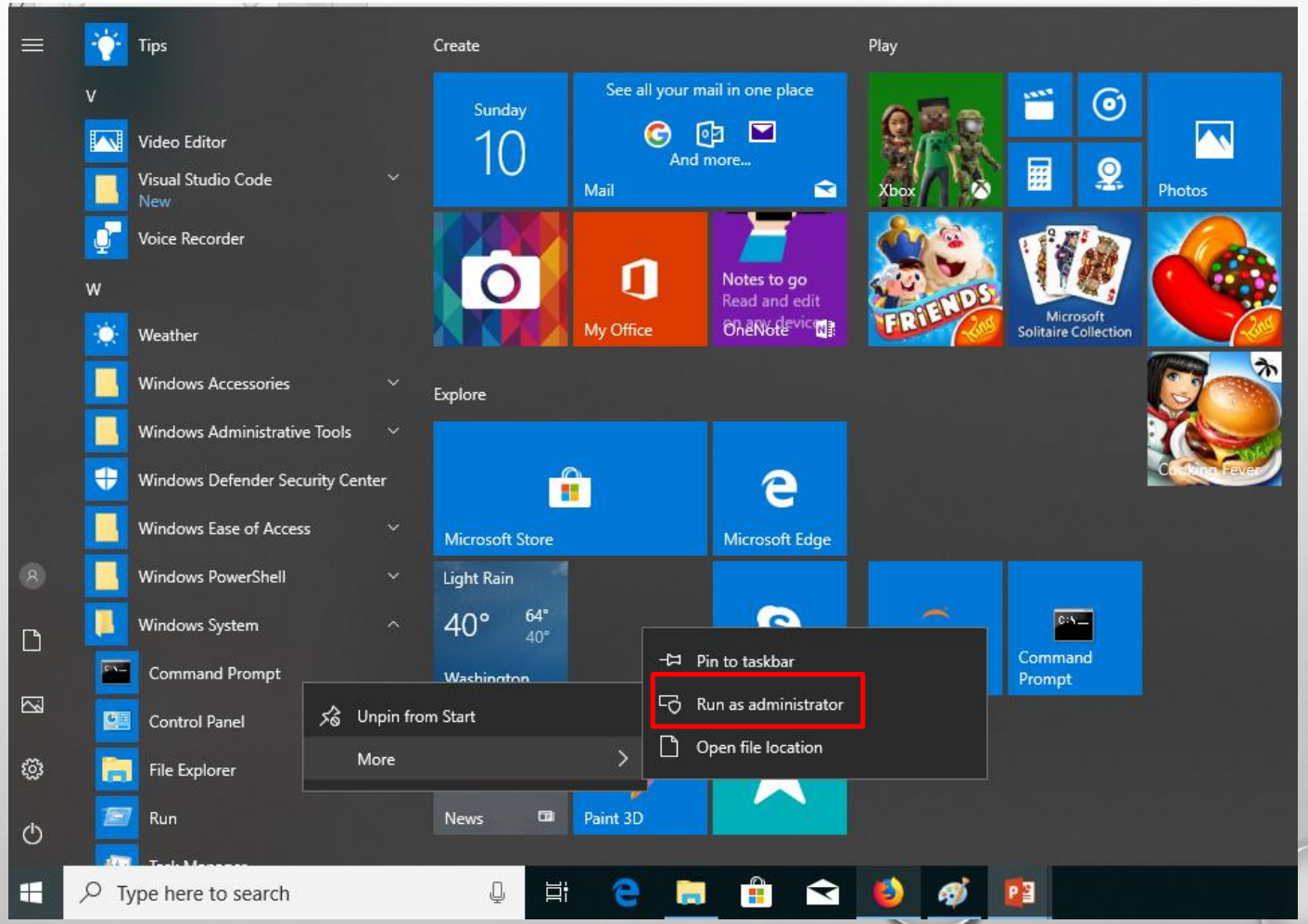
COMMAND LINE INTYRFACE

COMMAND INTERPRETER

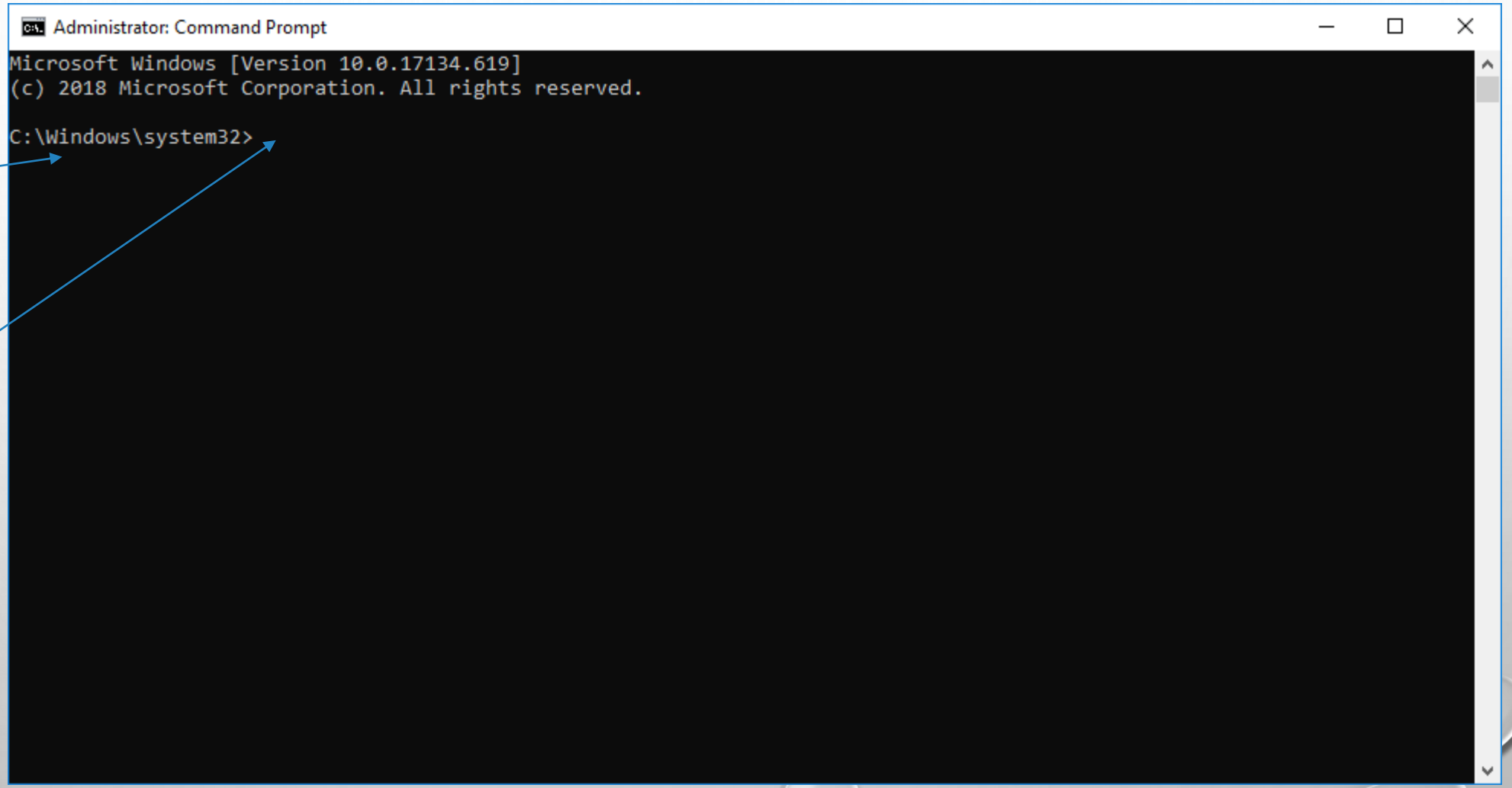
- COMMAND.COM (IN THE PREVIOUS WINDOWS VERSIONS)
- CMD.EXE

HOW TO RECEIVE COMMAND INTERPRETER WINDOW

- WIN+R | CMD.EXE
- START MENU\
WINDOWS SYSTEM\
COMMAND PROMPT



COMMAND PROMPT WINDOW



Current directory as a prompt (invitation to input a command)

It is necessary to type a command here

COMMAND GENERAL SYNTAX

COMMAND_NAME PARAMETER1 PARAMETER2 … /KEY1 /KEY2 …

WHERE:

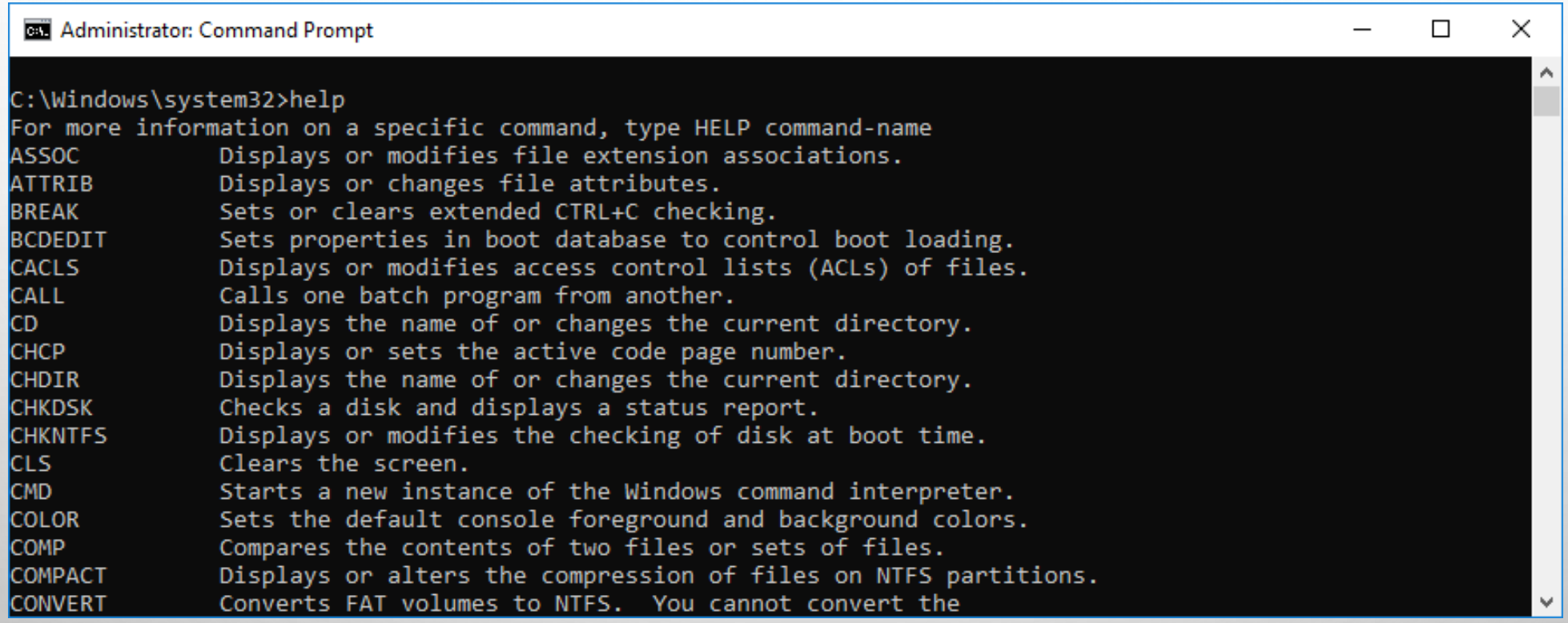
- COMMAND_NAME – DETERMINE THE ACTION TO BE DONE (COPY, TYPE, MOVE, DELETE, AND ETC.)
- PARAMETER – THE OBJECT TO BE PROCESSED
- KEY – DETAILS HOW IT WILL BE DONE

ADDITIONAL SYNTAX

- STANDARD INPUT IS MADE BY A KEYBOARD
- STANDARD OUTPUT IS MADE ONTO A MONITOR (DISPLAY)
- ONE CAN CHANGE STANDARD OUTPUT/INPUT DEVICES:
  - > (>>) REDIRECTION OF OUTPUT (DIFFERENCE IN SIGNS: “>” - IF OUTPUT FILE EXISTS, IT WILL BE REWRITTEN, ITS INITIAL CONTENT WILL BE LOST; “>>” - IF OUTPUT FILE EXISTS, IT WILL BE ADDED WITH A NEW CONTENT AT THE END)
  - < REDIRECTION OF INPUT
- | - COMMAND PIPELINE (COMMAND1|COMMAND2 – COMMAND1 OUTPUT WILL BECOME COMMAND2 INPUT)

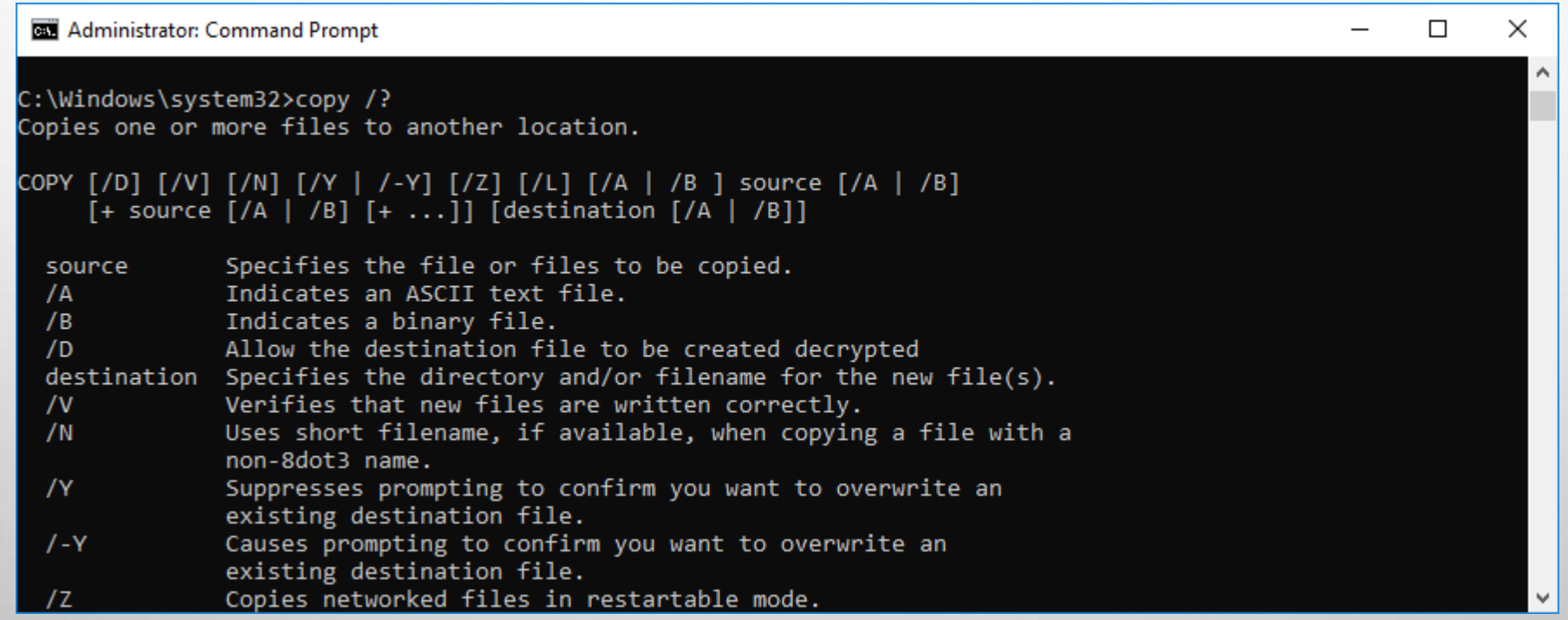
HELP

“HELP” – LIST OF EXISTING COMMANDS



HELP

"COMMAND /?" OR "HELP COMMAND" – DELIVERS COMMAND SYNTAX AND DESCRIPTION



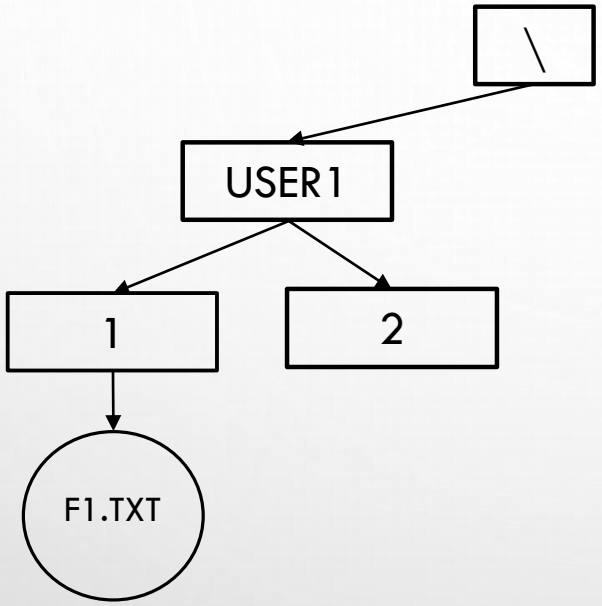
ADDITIONAL INFORMATION: IN GENERAL

- CURRENT DIRECTORY – THE DIRECTORY WHICH NAME ISN'T NECESSARY TO INDICATE IN COMMAND (IMAGINE THAT YOU ARE IN IT), IT'S NAME USUALLY IS SHOWN IN THE COMMAND LINE AS A PROMPT (BUT THIS MIGHT BE CHANGED WITH "PROMPT" COMMAND USAGE, OR HIDDEN BY "ECHO OFF" COMMAND)
- IN THE HELP WINDOWS: SQUARE BRACKETS ARE USED WITH PARAMETERS AND KEYS WHICH ARE NOT OBLIGATORY (OPTIONAL)

ADDITIONAL INFORMATION: FILE NAMES

- THERE IS NO DIFFERENCE BETWEEN LETTERS' REGISTERS (ASD.TXT ==asd.txt)
- IF ONE USES THE LONG FILE NAME (WITH BLANK SYMBOLS IN IT) IT IS NECESSARY TO SURROUND IT WITH " " SYMBOLS
- FILES COULD BE INDICATED BY 3 TYPES OF NAMES:
  - ✓ FULL NAME: DETERMINED FROM THE ROOT DIRECTORY ([C:]\DIR1\DIR2\FILE.TXT)
  - ✓ CONDITIONAL NAME: DETERMINED FROM THE CURRENT DIRECTORY (DIR1\DIR2\FILE.TXT)
  - ✓ SIMPLE NAME: FILE.TXT (IF THIS FILE IS LOCATED IN THE CURRENT DIRECTORY)
- ONE CAN USE TEMPLATE SYMBOLS:
  - ✓ * - FOR ANY SEQUENCE OF SYMBOLS
  - ✓ ? – FOR ANY SINGLE SYMBOL

FILE NAMES



FULL FILE NAME: \USER1\1\F1.TXT (IF DRIVE WHERE IT IS LOCATED IS CURRENT ONE, OTHERWISE C:\USER1\1\F1.TXT)

CONDITIONAL FILE NAME: IF \USER1 – IS A CURRENT DIRECTORY AT THE MOMENT, THEN – 1\F1.TXT)

SIMPLE NAME: IF \USER1\1 – IS A CURRENT DIRECTORY AT THE MOMENT, THEN – F1.TXT USAGE IS POSSIBLE)

EXAMPLES OF TEMPLATE SYMBOLS USAGE

- *.TXT -> ALL FILES (ANY NAME) WITH “TXT” EXTENSION

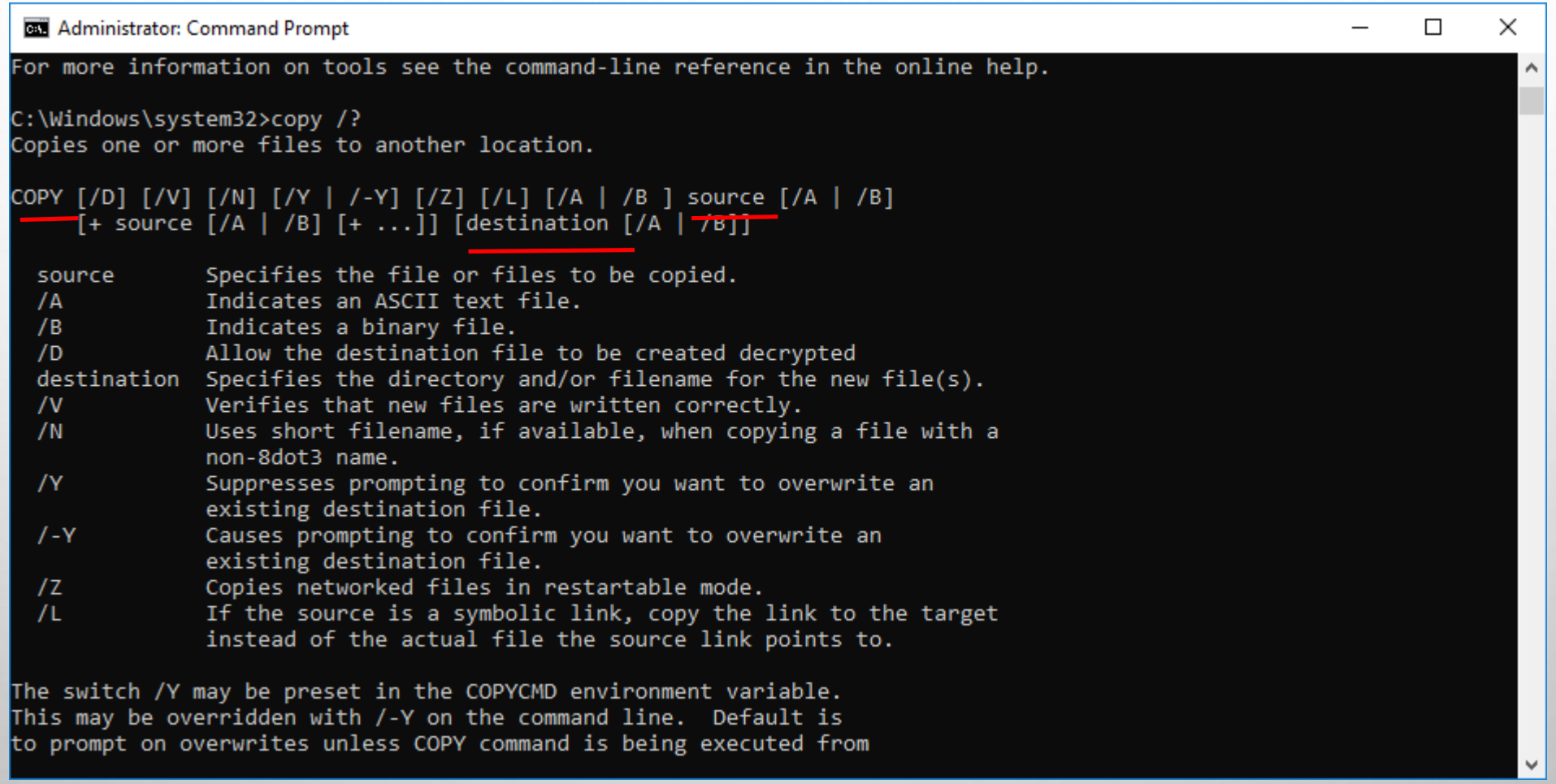
(I.E. 123.TXT, “MY FILE.TXT”, _ERROR_.TXT)

- ??? -> ANY NAME CONSISTED OF 3 LETTERS OR LESS (NO MORE THAN 3)

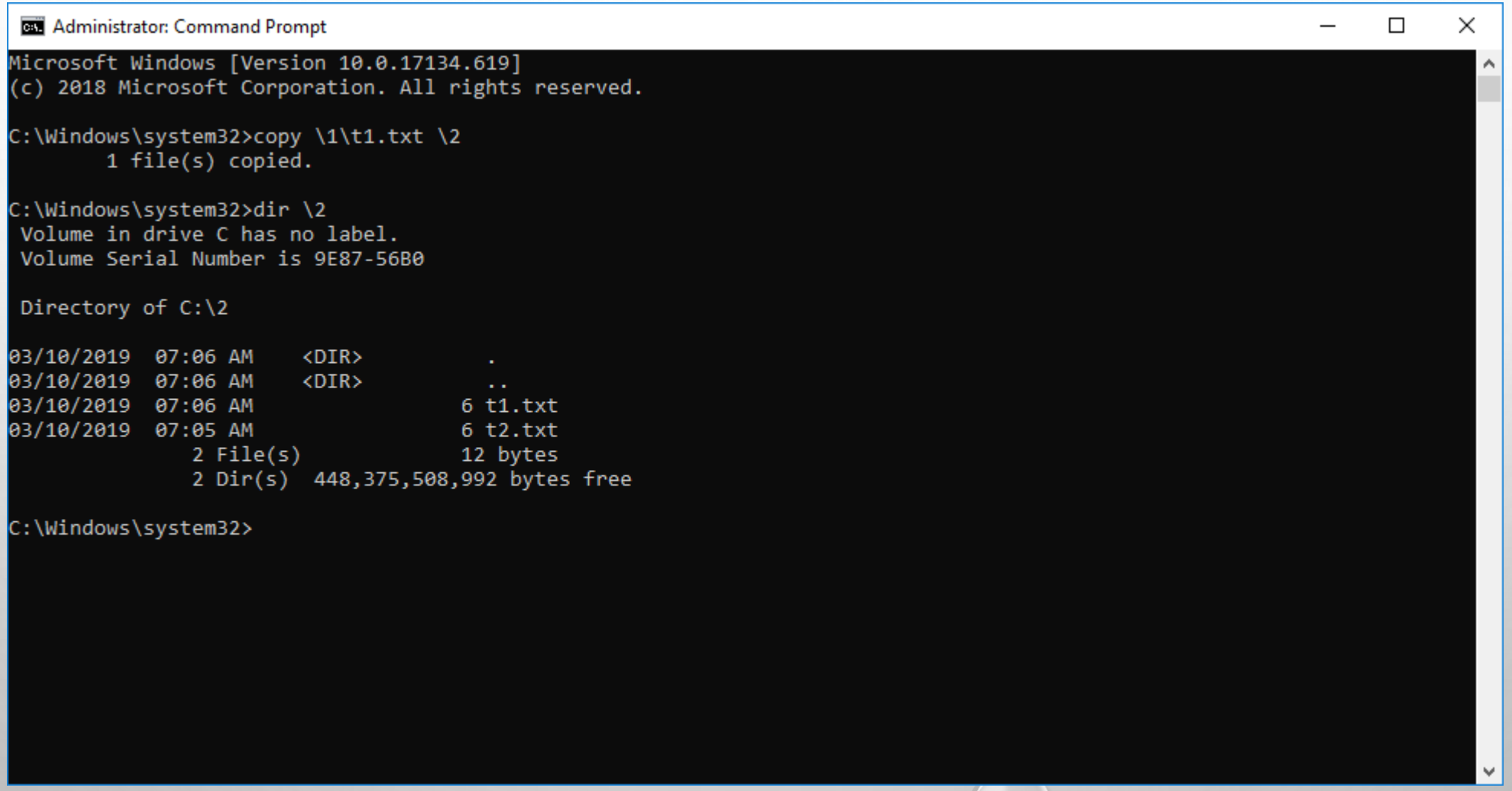
(I.E. 123, 11, 1, 2)

ACTIONS WITH FILES

TO COPY FILES: COPY & XCOPY



EXAMPLE 1


Administrator: Command Prompt
Microsoft Windows [Version 10.0.17134.619]
(c) 2018 Microsoft Corporation. All rights reserved.
C:\Windows\system32>copy \1\t1.txt \2
1 file(s) copied.
C:\Windows\system32>dir \2
Volume in drive C has no label.
Volume Serial Number is 9E87-56B0
Directory of C:\2
03/10/2019 07:06 AM <DIR> .
03/10/2019 07:06 AM <DIR> ..
03/10/2019 07:06 AM 6 t1.txt
03/10/2019 07:05 AM 6 t2.txt
2 File(s) 12 bytes
2 Dir(s) 448,375,508,992 bytes free
C:\Windows\system32>