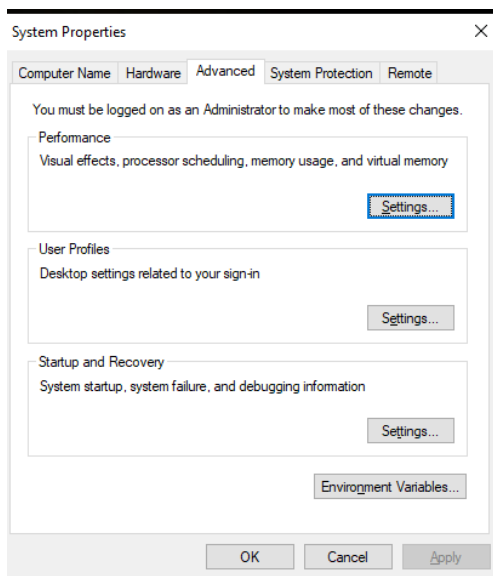
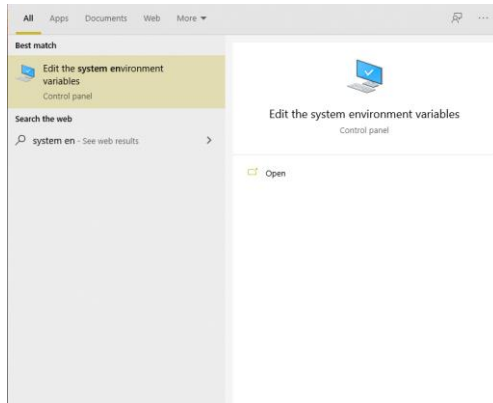


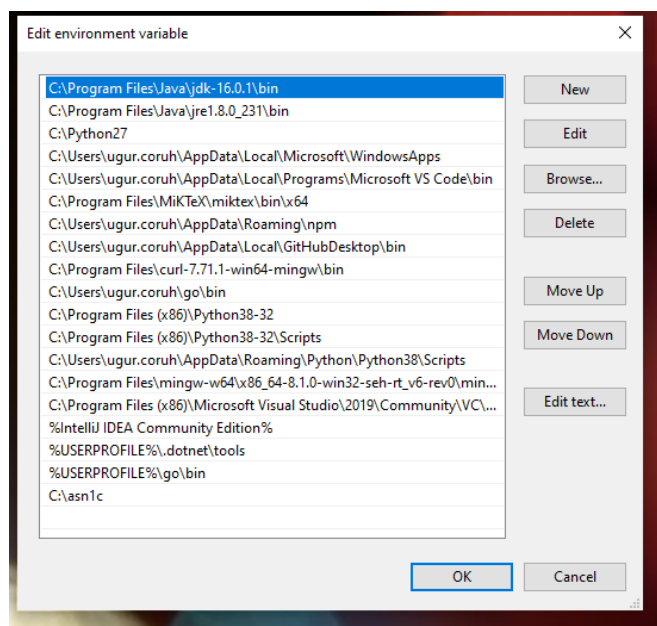
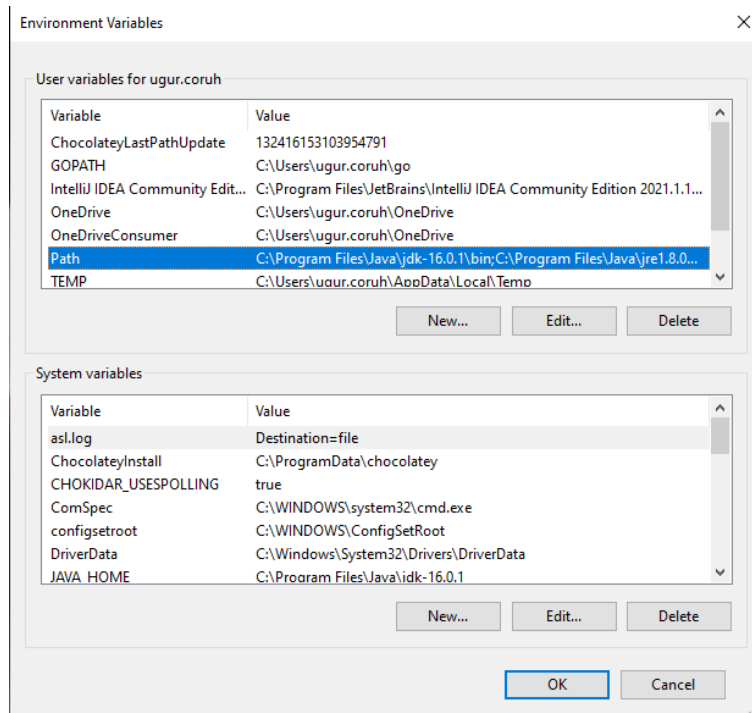
1. Programming Introduction
  - a. Operating System Basics
    - i. System folders

[https://en.wikipedia.org/wiki/Special\\_folder](https://en.wikipedia.org/wiki/Special_folder)

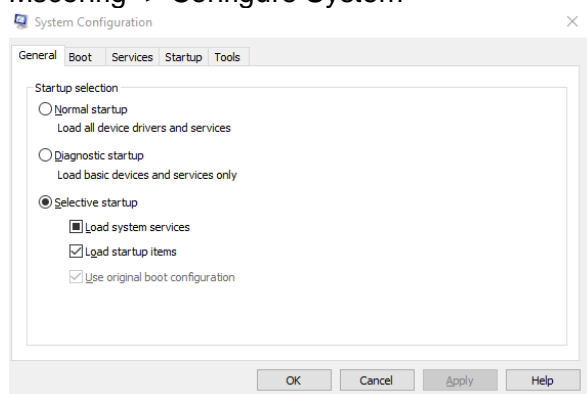
[https://en.wikipedia.org/wiki/Unix\\_filesystem#Conventional\\_directory\\_layout](https://en.wikipedia.org/wiki/Unix_filesystem#Conventional_directory_layout)

- ii. System parameters

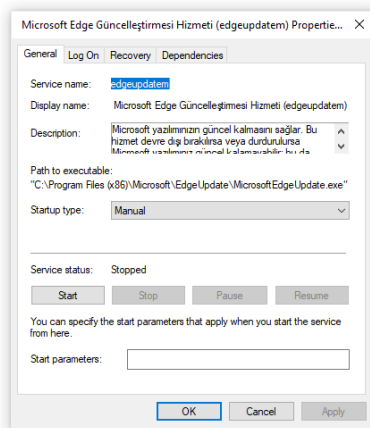
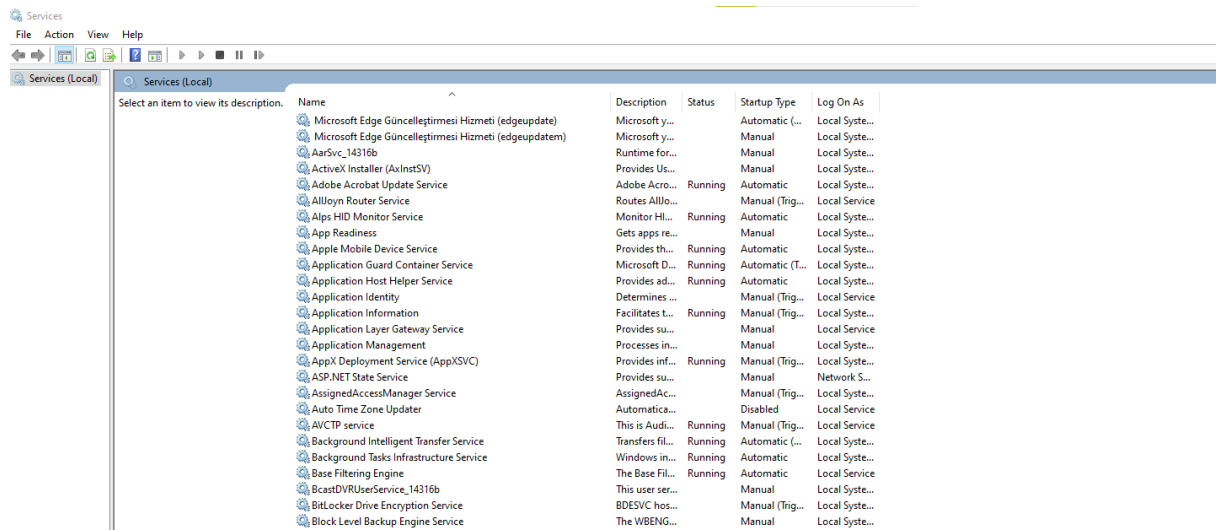




## Msconfig -> Configure System

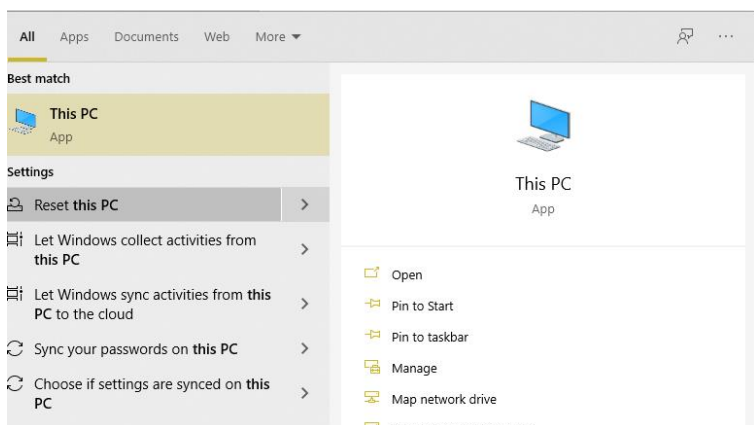


## Services.msc

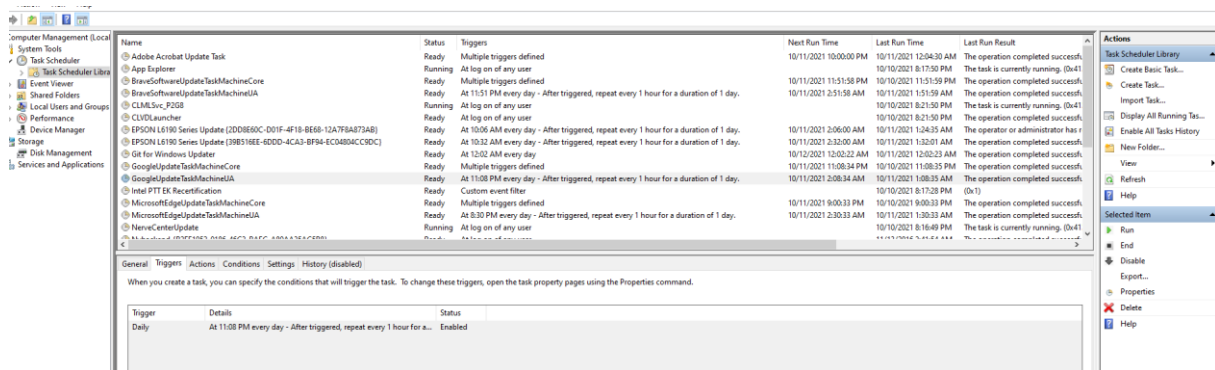


### iii. Storage management

This PC -> Manage



## Task Scheduler



- b. Computer Network Basics
- c. IP, Port, DNS settings, NAT etc.
- d. Remote connections (FTP, SSH, RDP, XRDP)

e. Putty, Mobaxterm

## 2. Numerical System Basics

1. Binary system
2. Hexadecimal system

b. Character Sets

## 3. Algorithm Basics

## 4. Introduction to Analysis of Algorithms

- a. Algorithm Basics
- b. Flowgorithm
- c. Pseudocode

## 5. Programming Topics

## 6. Sysinternals Utilities

a. Programming Environment Setup and Configuration

i. C / Cpp

1. DevCpp
2. Code Blocks
3. GCC/G++ Compiler (Mingw) / Clang-cl (LLVM)
4. Vscode

a. GCC

b. CLANG

## 5. Visual Studio Community Edition

- a. Visual Studio x64 x86 Configurations and Features
- b. Project Types

## 6. Notepad++

## 7. Vi/Vim

## 8. Eclipse

- a. Simple Java Project Generation
- b. Jar Export as Library or Executable
- c. Maven Project Generation
- d. Junit Test Case Generation and Testing

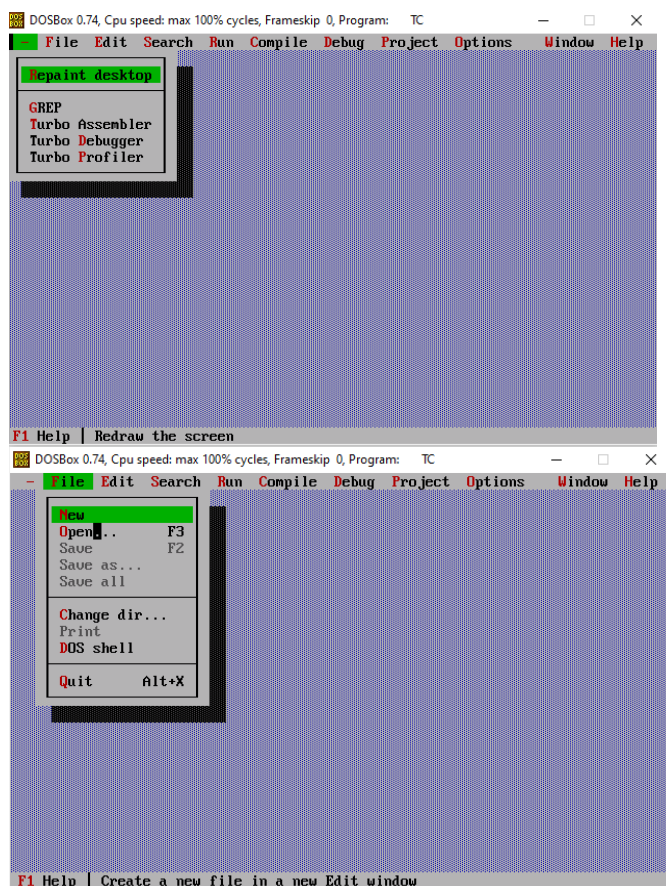
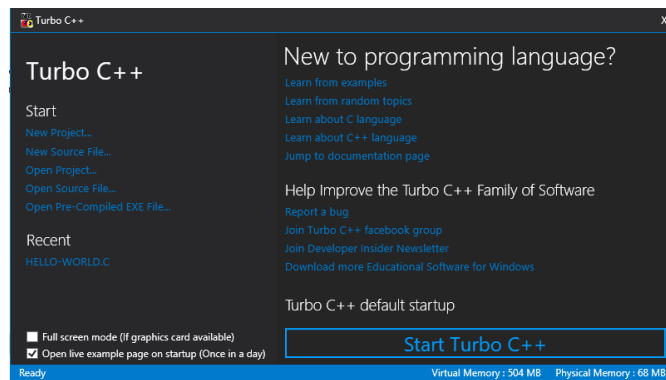
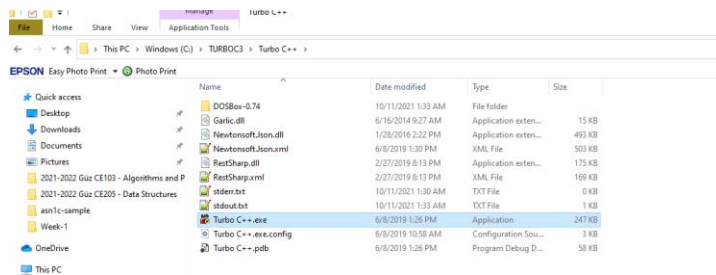
## 9. Netbeans

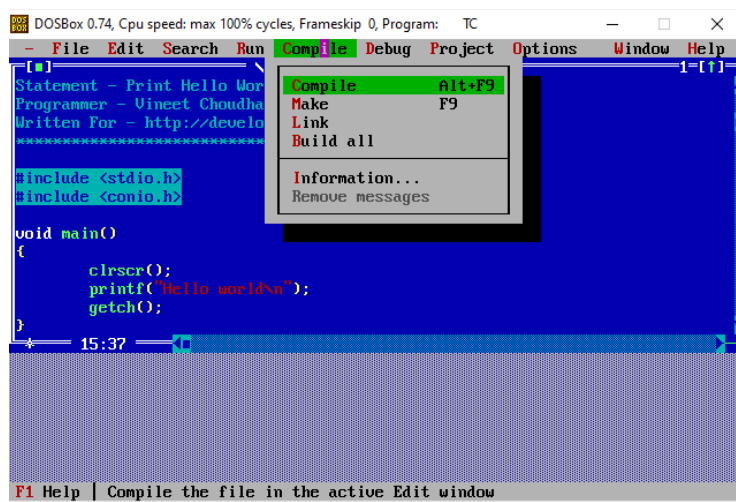
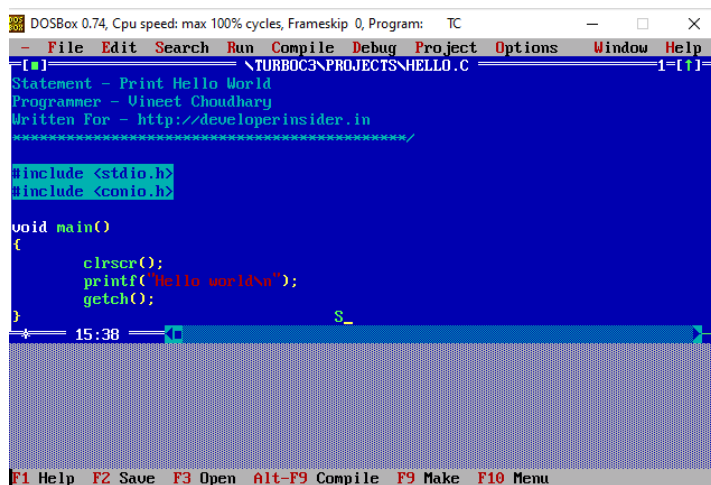
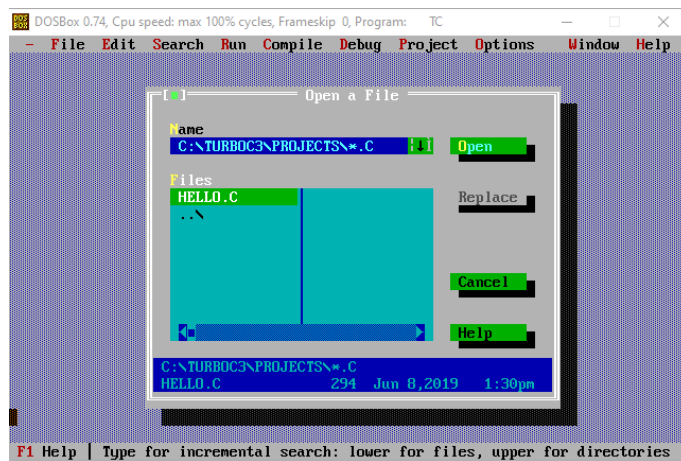
## 10. Turbo C

## 11. Turbo C++

C:\TURBOC3\Turbo C++

<https://developerinsider.co/download-turbo-c-for-windows-7-8-8-1-and-windows-10-32-64-bit-full-screen/>





Then just Run from Menu

## ii. Java

1. JDK, JRE Setup
2. System Environments and Paths
3. Netbeans
4. Eclipse
5. IntelliJ Idea (jetbrains)

- 6. vscode
    - 7. Notepad++
  - iii. C#
    - 1. Visual Studio Community Edition
    - 2. Notepad++
- b. Programming Environment Setup and Configuration
  - i. Notepad++ (Notepad for Source Code)
  - ii. HxD (Hex Editor)
  - iii. Marktext (Markdown Syntax Editor)
  - iv. Cygwin (Linux environment for Windows)
  - v. Dependency Walker (32-bit or 64-bit Windows module dependency checker)
  - vi. Doxygen (Code Documentation)
  - vii. Sonarlint (Code Quality and Code Security Extension)
  - viii. Codepen.io (online code sharing)
  - ix. Codeshare.io (real time code sharing)
  - x. Codebeautify.org (online data conversion tools)
  - xi. AsciiFlow.com (ASCII drawing tool)
  - xii. Freemind (opensource mindmap application)
  - xiii. Wireflow (user flow designer)
  - xiv. PlantUML (software designer)
  - xv. Drawio (drawing tool)
  - xvi. Putty (Remote Connection)
  - xvii. MobaXterm (Remote Connection)
  - xxiii. Teamviewer (Remote Connection)
  - xix. Paletton.com (Color Chooser)
  - xx. Understand (Static Code Analysis)
  - xxi. JD Project (Java Decompiler)
  - xxii. Cutter (Multi-Platform Reverse Engineering Tool)
  - xxiii. IDA Pro / Freeware (Native Reverse Engineering Tool)
  - xxiv. Travis-CI
    - 1. Travis.yml
  - xxv. Jenkins
  - xxvi. Valgrind
  - xxvii. Docker
    - 1. Dockerfile
    - 2. DockerHub
    - 3. Docker Compose Yaml
    - 4. Dockerrun.aws.json (AWS)
  - xxviii. Nuget Packages
  - xxix. Extras
    - 1. vim/vim-wim32-installer (windows vim installer)
  - xxx. SCV Cryptomanager
  - xxxi. Addario CryptoBench
  - xxxii. Raymond's MD5 & SHA Checksum Utility
  - xxxiii. SlavaSoft HashCalc
  - xxxiv. Portable PGP
- c. Online Programming Envoriments
  - i. Hackerrank
  - ii. CS50 Sandbox
  - iii. Programiz C Online Compiler

