app. exe

RAM

Exe?

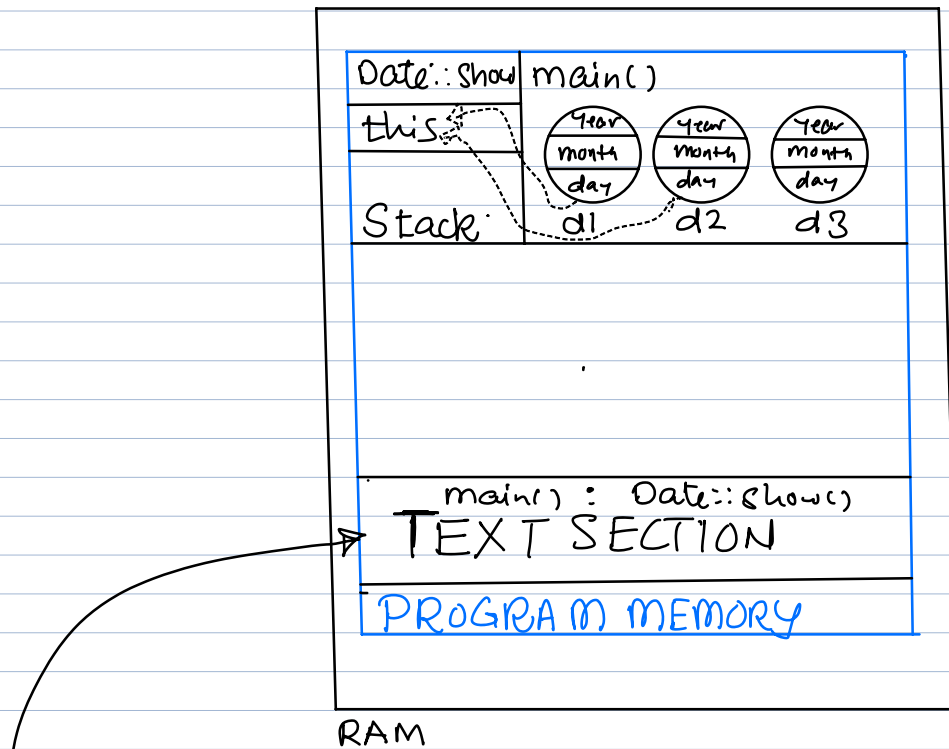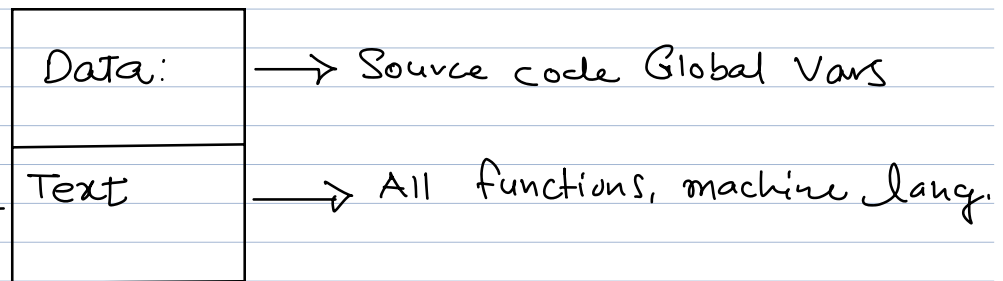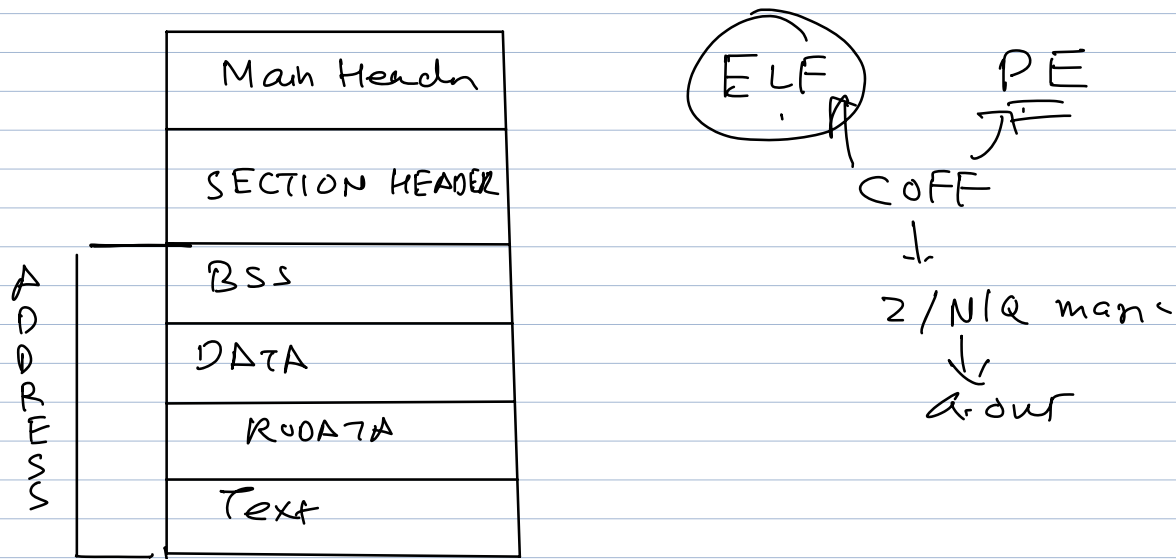|	
Data:	→ Source code Global Vars
Text	→ All functions, machine lang.

main()
Date :: Show()

1) Text = All functions: Machine lang.

2) Rodata: Global const variable, local static
const, String

3) Data: Global Initialized variable

4) BSS: Global Uninitialized variable.
BSS: block started by symbn

Main Header
SECTION HEADER
BSS
DATA
RODATA
Text

A
D
D
R
E
S
S

ELF   PE
          JF
      COFF
        ↓
      z/NIQ mans
        ↓
      4.our

execve()   Create Process Ex()

C Programming:
    1) Ajay Mittal C
    2) Understanding and Using C Pointers -> Richard Reese
    (help: advanced C Pointer workshop of CPA)

Basic DSA
    1) Array based techniques:
         dynamically resizable array, array based stack, queue, dequeue

Assembly Language
    1) Professional Assembly Language : Richard Blum

Linkers & Loaders (John Levin)
Advanced C/C++ Compiling (STRONGLY RECOMMENDED)

System Call Interface:
1) Linux System Programming -> Robert Love
2) Advanced Programming Under Unix Environment -> W. Richard Stevens (!)
    OR
    Linux System Programming -> KIWAN BIILIMORIA (RECOMMENDED)
3) The Linux Programming Interface -> Michael Kerrisk
(After C : You can start this book)

Operating System Concepts:
1) Computer Organization : Zaky or Stalling
2) Modern Operating System : Andrew Tanenbaum

Linux Kernel Module Programming Guide (KERNEL PROGRAMMING INTRO ENOUGH)
+
Linux Kernel Development by Robert Love

#------
DOS ENVIRONMENT SET UP : PETER ABEL : IBM PC Assembly Language

Advanced 80386 programming by James Turley

Understanding the Linux Kernel
2nd Chapter: MEMORY MANAGEMENT
3rd PROCESSES
4th Interrupt

NIRVANA

C++ Primer: 4th edition   (Liepmaan)

Template Programming : The Complete Guide 1st Edition

Inside COM -> Del Rogerson

Stroustrup : 4th Edition

C++ Move Semantics

C++ 17: The Complete Guide

Template Programming : The complete guide :2nd edition

C++ 20: The Complete Guide

```cpp
class Date    // class definition (= વ્યાખ્યા)
{   public:    // SERVER CODE
        int day;

        int month;

        int year;

        void show()
        {
            cout << day << "/" << month
                 << "/" << year << endl;
        }
};
```

```cpp
int main (void)
{   Date d1;  // class Date Instantiation   //CLIENT
    Date d2;
    Date d3;
}
```

Act of creating object from class

is called as <u>Instantiation</u> of
<u>Class</u>

इंस्टांसिएशन

Instantiation = Act of making an instance

Date

```
┌─────────┐
│  year   │
├─────────┤
│  month  │
├─────────┤
│  day    │
└─────────┘
```

SERVER
SIDE CODE

C++
Compiler

CIENT SIDE
CODE