win - core i5

.c file
english
source code

compile → .obj

binary code

run → .exe

win ✓
dos ✗
unix ✗

machine independent → partial portable ← platform dependent

dos - amd

.c file
english
source code

compile → .obj

binary code

run → .exe

win ✗
dos ✓
unix ✗

MNP
MOBILE NO PORTABILITY

AIRTEL
NUMBER
JAVA
WIN

BSNL   UNIX

JIO   LINUX

VI   MAC

JAVA - WORA - WRITE ONCE RUN ANYWHERE

INDIA - WIN

RUSSIAN - LINUX

WEB APP
WWW.FB.COM
WORLD WIDE WEB

INSTA

US - MAC

UK - UNIX

CROSS PLATFORM APP / LANGUAGES

JAVA / .NET / PY

SPIDER WEB

UK   RUSSIA

INDIA

USA

FB

UAE

PLATFORM1   WINDOWS

FB

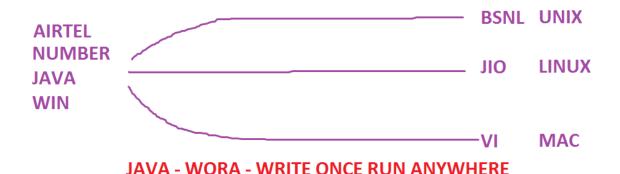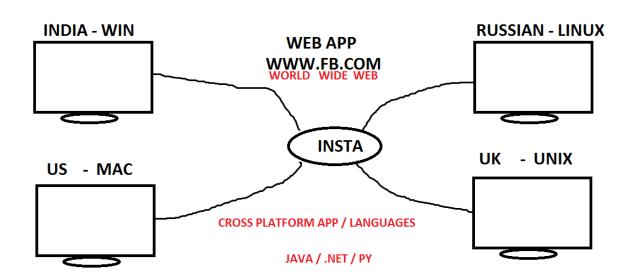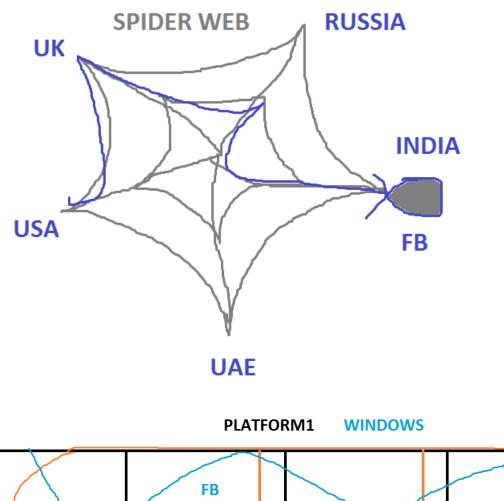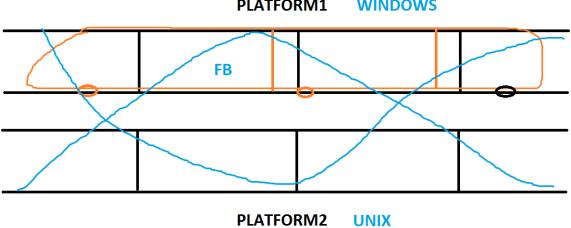PLATFORM2   UNIX

C is machine independent but platform dependent. Due to this we can't develop web applications with c language and we can develop only the standalone applications.

The application installed in a single system and operated from that system only is called standalone app.

To design the web applications we are using the languages like java / .net / python etc because of they are machine independent and platform independent. Web applications are installed in a server operated with the clients.

FUNDAMENTALS OF C

C character set: Every programming language is using a particular character set and by using this character set only we can make the programs [software]. C is using ASCII character which comes with **256 characters**. In this we are having **52 alphabets** [**a-z, A-Z**], **10 digits** [**0-9**], **44 operators** [**+, -, *,…**], **14 separators** [, . : ; " " ' ' { } ,….] and remain all are **special characters**.

English language	C language
26 alphabet set	ASCII character set - 256
English words	Keywords – 32
English sentences	Instructions
English paragraphs	Programs
English documents	software

ASCII – American Standard Code for Information Interchange – IBM [International Business Machines] corporation – American company

Java / .net / py – UNICODE Character set [Universal Code] - 65536

4 type of number systems

1. Binary system - %d
2. Octal system - %o
3. **Decimal system** - %d
4. Hexadecimal system - %x

CHARACTERS	ASCII VALUES
a-z	**97-122**
A-Z	**65-90**
0-9	**48-57**
+	43
*	42
Space	32
Back space	8
Tab	9
Enter key	10
Esc	27

Compilation and execution process:

compiler   **preprocessing**

```
/* source code */
#include<stdio.h>
void main()
{
printf("abc");
}
```

97   - ascii value of 'a' - decimal system

2 |48 - 1
1 |24 - 0
2 |12 - 0
2 |6 - 0
2 |3 - 0
|1 - 1

1 1 0 0 0 0 1 - binary value of 97   **RUN**

binary to decimal

64 + 32 + 1 = 97

output

a

LOADER

RAM

PROCESSOR

ASCII - American Standard Code for Information Interchange