History of c

Basically c language introduced by "dennis ritchie" in 1972. Ritchie is one of the software engineer in at & t bell labs [american telephone & telegraph], located at murray hill, new jersy, usa.

Ritchie adopted c language from b language, designed by "ken thomson", one of the software engineer in at & t bell labs.

Thomson adopted b language from bcpl [basic combined programming language], designed by an assistant professor named "martin richards" in cambridge university.

In 1989 ansi [american national standards institute] released a new version of c with the name "ansi-c", which is popular with the name "c-89".

In 1999 ios [international organization for standardization], now it is iso [international standard organization] released a new version of c language with the name "c-99".

Basically c language introduced to rewrite unix operating system. Nowadays we can create and execute a c program on most of the processor with any machine. Hence c is called it is a machine independent programming language. I.e. We can create and execute a c program on 80386 / 80486 / 80586 / inter core i3 / i5 / i7 / i9 / amd etc.

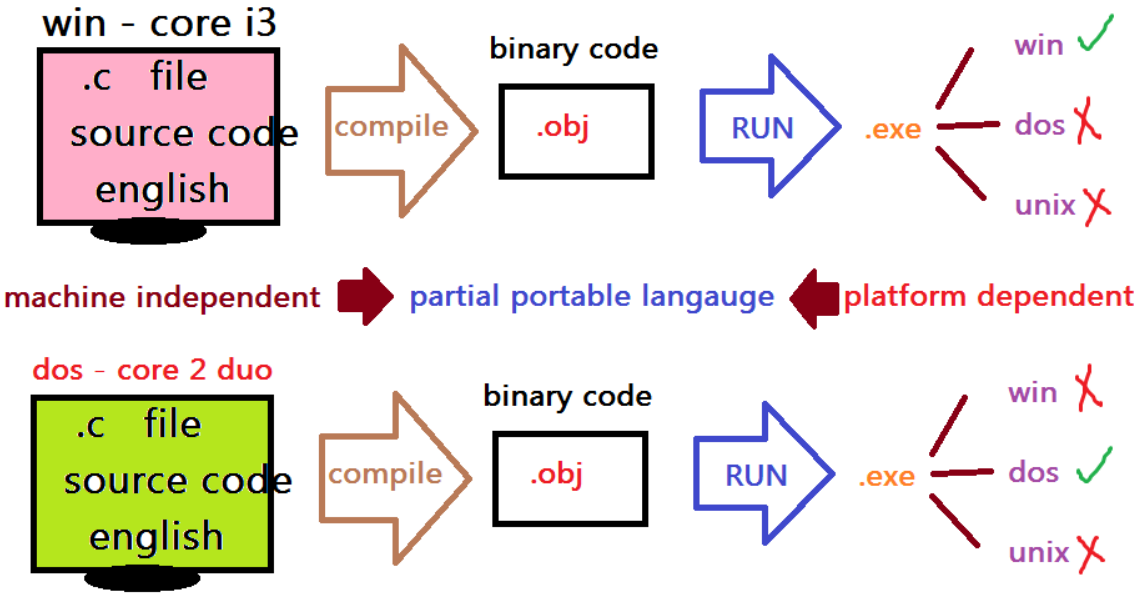
For example the languages like 8086 / 8088 are working only on the processor 8086 and 8088. Hence they are called machine dependent programming languages. But c is a platform dependent programming language. I.e. Once a program created for one operating

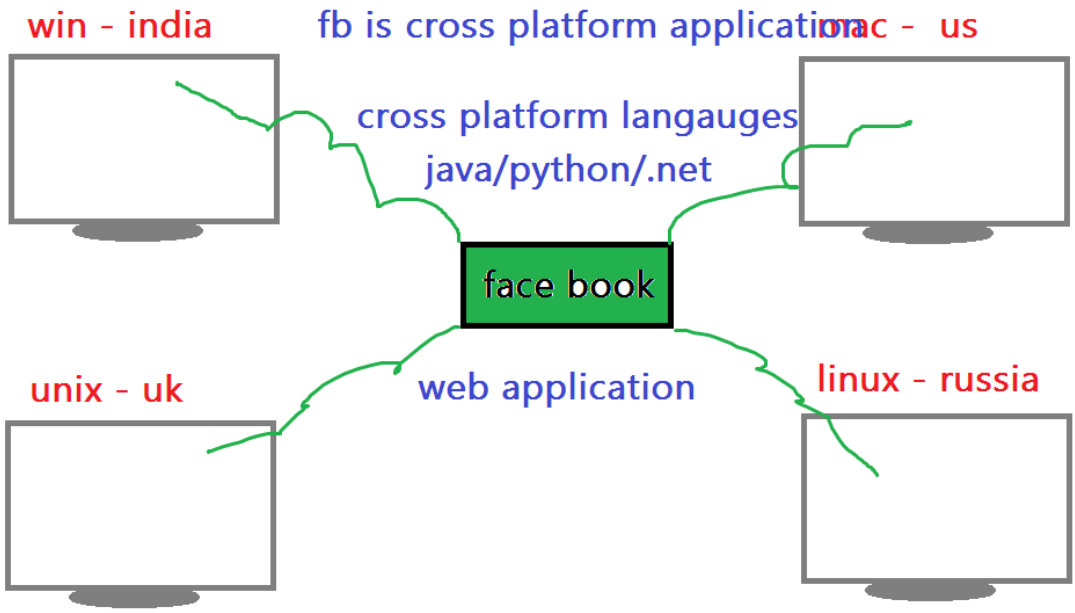
system is not working in another operating system. This kind of languages are called platform dependent programming language. Hence c not allows to develop the web applications. For example the application created for windows operating system is not working in unix / linux / mac etc. Hence c is also called it is a partial portable language. Due to this problem c allows to design only stand alone applications which are installed in a particular system and available to that system only.

Eg. Ms-office, antivirus, media player, browser, device drivers, o.s,…

Java / .net / python are called platform independent programming languages. Once a java program designed for one operating system is working on any type of operating

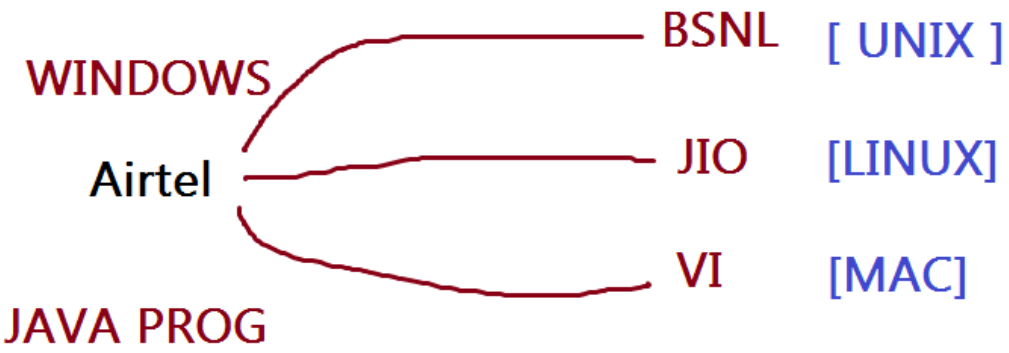
system. Hence they are used to develop web applications.



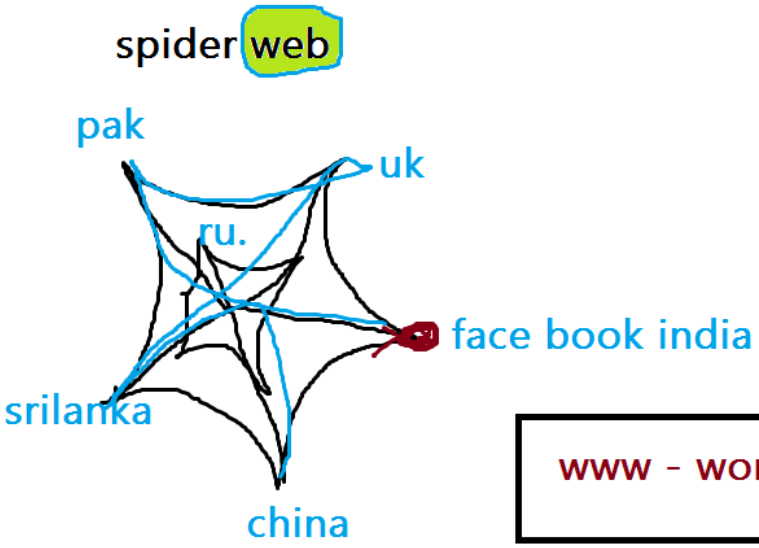


MNP - Mobile No Portability

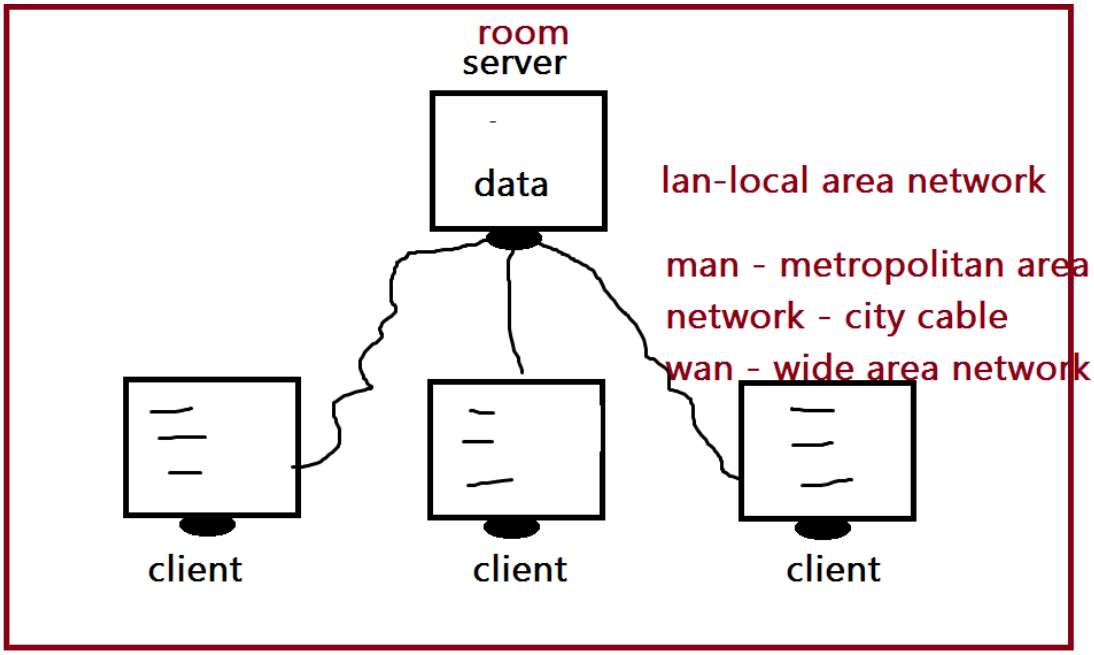
platform independent



WORA - Write Once, Run AnyWhere



www - world wide web



Fundamentals of c

C character set:

English language	C language
26 alphabets	256 ascii characters
English words	32 keywords
Sentenses	Instructions
Paragraphs	Programs
Documents	Software

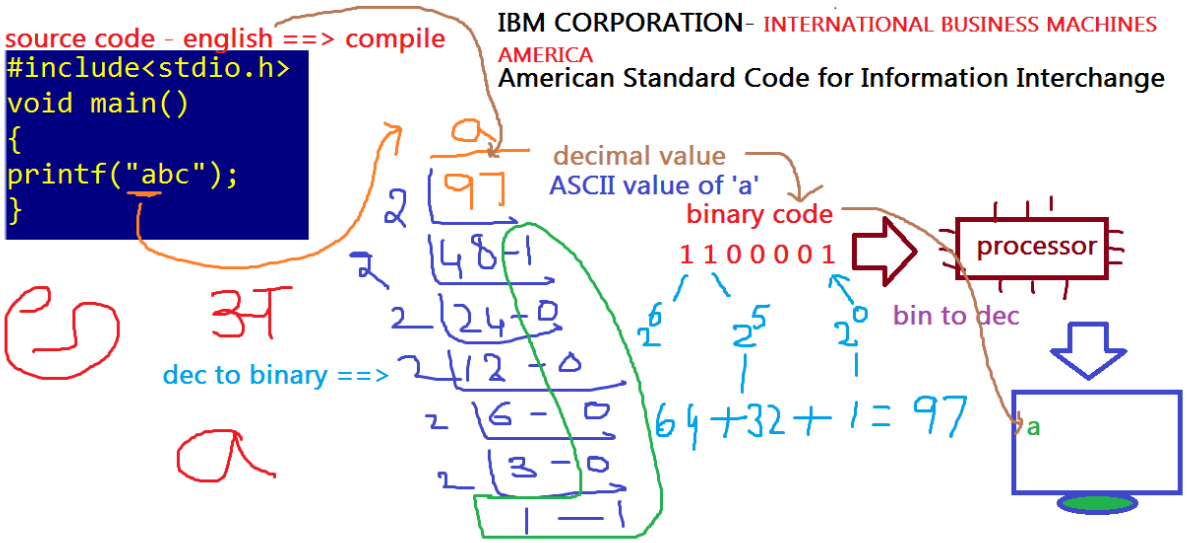
Ascii – american standard code for information interchange

Java / python/ .net ➔ unicode – universal code – 65536 – 256 ascii + tel + hin + tamil + marathi etc.

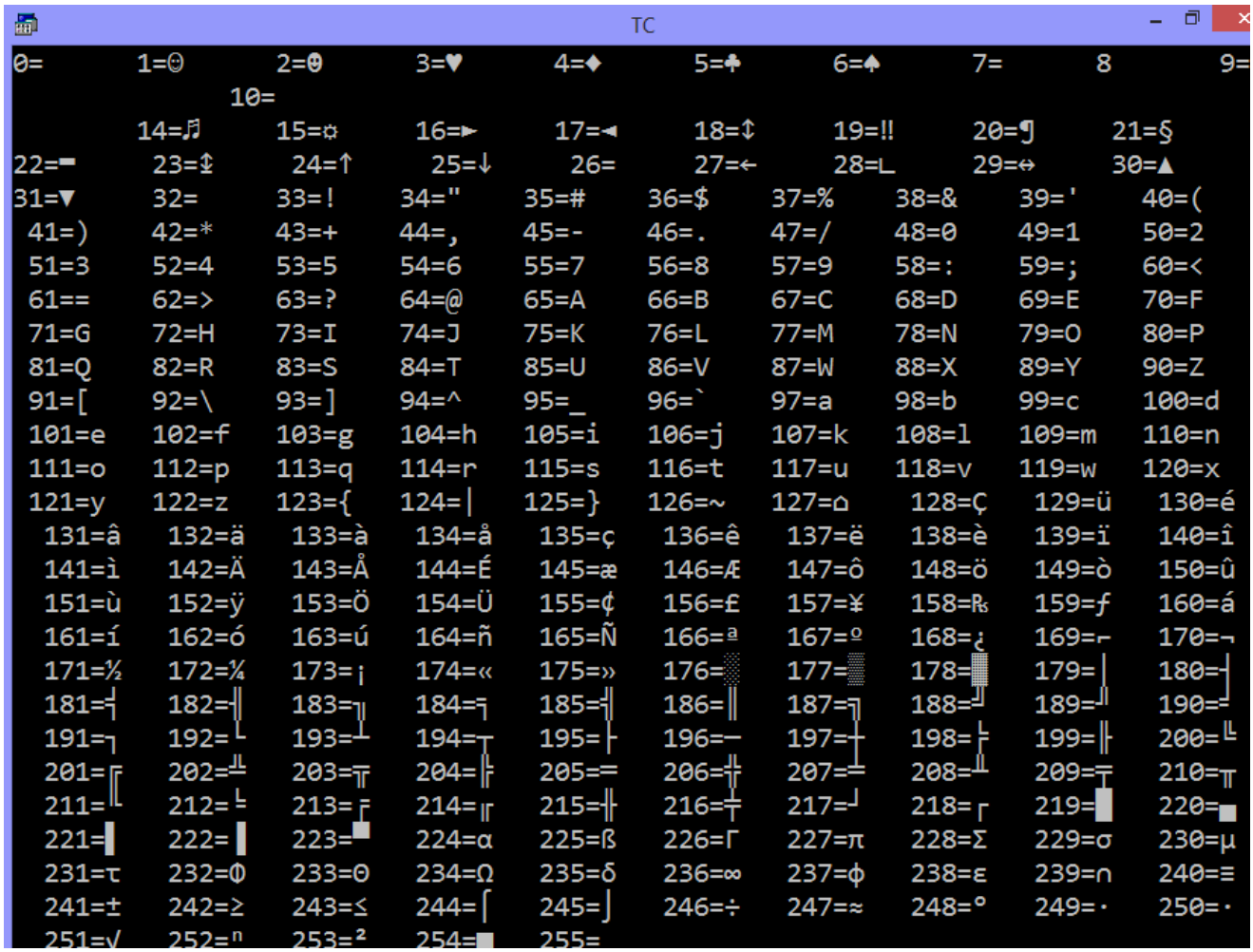
Every programming langauge using a charater set and by using this character set only we can develop the programs. C uses ascii character set which comes with 256 [0-255] characters. In this we are having 52 alphabets [a-z,a-z], 10

digits [0-9], 44 operators [+, -, *,…], 14 separators [, . : ; “ “, ‘ ‘ { },…] and remain all are special characters.

Characters	Ascii values
A-Z	65-90
a-z	97-122
0-9	48-57
+	43
*	42
Space	32
Back space	8
Tab	9
Enter key	13
Esc	27



Ascii character list:


TC
0= 1=☺ 2=☻ 3=♥ 4=♦ 5=♣ 6=♠ 7= 8 9=
10=
14=♫ 15=☼ 16=► 17=◄ 18=↕ 19=‼ 20=¶ 21=§
22=▬ 23=↨ 24=↑ 25=↓ 26= 27=← 28=∟ 29=↔ 30=▲
31=▼ 32= 33=! 34=" 35=# 36=$ 37=% 38=& 39=' 40=(
41=) 42=* 43=+ 44=, 45=- 46=. 47=/ 48=0 49=1 50=2
51=3 52=4 53=5 54=6 55=7 56=8 57=9 58=: 59=; 60=<
61== 62=> 63=? 64=@ 65=A 66=B 67=C 68=D 69=E 70=F
71=G 72=H 73=I 74=J 75=K 76=L 77=M 78=N 79=O 80=P
81=Q 82=R 83=S 84=T 85=U 86=V 87=W 88=X 89=Y 90=Z
91=[92=\ 93=] 94=^ 95=_ 96=` 97=a 98=b 99=c 100=d
101=e 102=f 103=g 104=h 105=i 106=j 107=k 108=l 109=m 110=n
111=o 112=p 113=q 114=r 115=s 116=t 117=u 118=v 119=w 120=x
121=y 122=z 123={ 124=| 125=} 126=~ 127=⌂ 128=Ç 129=ü 130=é
131=â 132=ä 133=à 134=å 135=ç 136=ê 137=ë 138=è 139=ï 140=î
141=ì 142=Ä 143=Å 144=É 145=æ 146=Æ 147=ô 148=ö 149=ò 150=û
151=ù 152=ÿ 153=Ö 154=Ü 155=¢ 156=£ 157=¥ 158=₧ 159=ƒ 160=á
161=í 162=ó 163=ú 164=ñ 165=Ñ 166=ª 167=º 168=¿ 169=⌐ 170=¬
171=½ 172=¼ 173=¡ 174=« 175=» 176=░ 177=▒ 178=▓ 179=│ 180=┤
181=╡ 182=╢ 183=╖ 184=╕ 185=╣ 186=║ 187=╗ 188=╝ 189=╜ 190=╛
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221=▌ 222=▐ 223=▀ 224=α 225=ß 226=Γ 227=π 228=Σ 229=σ 230=µ
231=τ 232=Φ 233=Θ 234=Ω 235=δ 236=∞ 237=φ 238=ε 239=∩ 240=≡
241=± 242=≥ 243=≤ 244=⌠ 245=⌡ 246=÷ 247=≈ 248=° 249=∙ 250=·
251=√ 252=ⁿ 253=² 254=■ 255=

C - TOKENS

DATA TYPES:

TO STORE ANYTHING IN OUR SYSTEM, WE SHOULD HAVE TO ALLOCATE THE MEMORY.