CS50: Week- 00 - Scratch

Lecture -0

🔗 **Cs50 Codespace & Scratch.Mit.edu**

base-1 : Unary,
base-2: Binary digit, (bit)

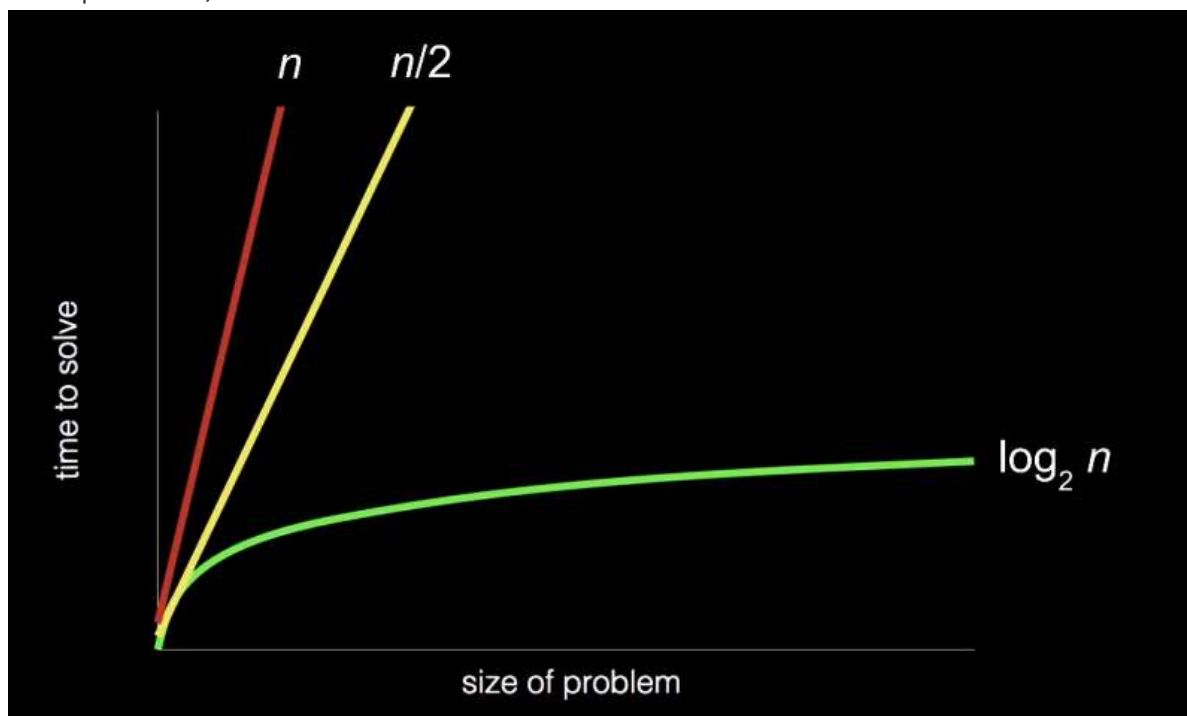1 Byte = 8 bits

0	1	2	3	4	5	6	7	8	9	0	.	,	!	?	/	"	'	space	_
48	49	50	51	52	53	54	55	56	57	48	46	44	33	63	47	34	39	32	95

\	(	)	*	+	=	-	@	A	B	C	D	E	F	G	H	I	J	K	L
92	40	41	42	43	61	45	64	65	66	67	68	69	70	71	72	73	74	75	76

M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	a	b	c	d	e	f
77	78	79	80	81	82	83	84	85	86	87	88	89	90	97	98	99	100	101	102

g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122

Uppercase - 65=A, 66=B, Lowercase - 97=a, 98=b..**Algorithm** (means steps acquired to solve problems)

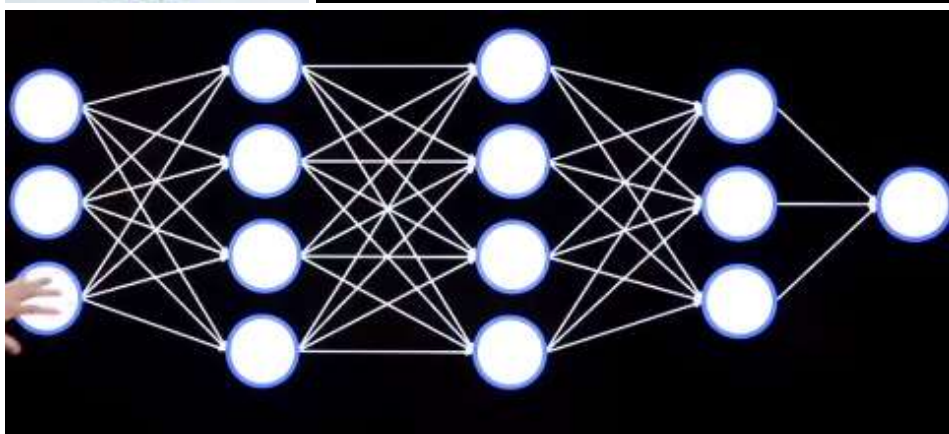Pseudocode

```
1    Pick up phone book
2    Open to middle of phone book
3    Look at page
4    If person is on page
5         Call person
6    Else if person is earlier in book
7         Open to middle of left half of book
8         Go back to line 3
9    Else if person is later in book
10        Open to middle of right half of book
11        Go back to line 3
12   Else
13        Quit
```

- functions
  - arguments, return values, variables
- conditionals
- Boolean expressions
- loops
- ...

Conditional

Boolean Expression

ASCII code table

Dec	Char	Unicode / Control name
0	^@ NUL	NULL
1	^A SOH	START OF HEADING
2	^B STX	START OF TEXT
3	^C ETX	END OF TEXT
4	^D EOT	END OF TRANSM.
5	^E ENQ	ENQUIRY
6	^F ACK	ACKNOWLEDGE
7	^G BEL	BELL
8	^H BS	BACKSP.
9	^I HT	CHARACT. TAB'TION
10	^J LF	LINE FEED
11	^K VT	LINE TAB'TION
12	^L FF	FORM FEED
13	^M CR	CARRIAGE RETURN
14	^N SO	SHIFT OUT
15	^O SI	SHIFT IN
16	^P DLE	DATA LINK ESCAPE
17	^Q DC1	DEVICE CONTROL1
18	^R DC2	DEVICE CONTROL2
19	^S DC3	DEVICE CONTROL3
20	^T DC4	DEVICE CONTROL4
21	^U NAK	NEG.ACKNOWLEDGE
22	^V SYN	SYNCHR. IDLE
23	^W ETB	END OF TRANS.
24	^X CAN	CANCEL
25	^Y EM	END OF MEDIUM
26	^Z SUB	SUBSTITUTE
27	^[ESC	ESCAPE
28	^\ FS	INFO. SEP. 4
29	^] GS	INFO. SEP. 3
30	^^ RS	INFO. SEP. 2
31	^_ US	INFO. SEP. 1
32	(space)	SPACE
33	! excl	EXCLAM. MARK
34	" quot	QUOT. MARK
35	# num	NUMBER SIGN
36	$ dollar	DOLLAR SIGN
37	% percnt	PERCENT SIGN
38	& amp	AMPERSAND
39	' apos	APOSTROPHE
40	(lpar	LEFT PAREN.
41	) rpar	RIGHT PAREN.
42	* ast	ASTERISK
43	+ plus	PLUS SIGN
44	, comma	COMMA
45	-	HYPHEN-MINUS
46	. period	FULL STOP
47	/ sol	SOLIDUS
48	0	DIGIT ZERO
49	1	DIGIT ONE
50	2	DIGIT TWO
51	3	DIGIT THREE
52	4	DIGIT FOUR
53	5	DIGIT FIVE
54	6	DIGIT SIX
55	7	DIGIT SEVEN
56	8	DIGIT EIGHT
57	9	DIGIT NINE
58	: colon	COLON
59	; semi	SEMI-COLON
60	< lt	LS.-THAN SIGN
61	= equals	EQUALS SIGN
62	> gt	GR.-THAN SIGN
63	? quest	QUESTION MARK
64	@ commat	COMM'IAL AT
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	[lsqb	LEFT SQ. BRACKET
92	\ bsol	REVERSE SOLIDUS
93	] rsqb	RT. SQR. BRACKET
94	^ hat	CIRCUM'X ACCENT
95	_ lowbar	LOW LINE
96	` grave	GRAVE ACCENT
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	{	L. CURLY BRACKET
124	|	VERTICAL LINE
125	}	R. CURLY BRACKET
126	~	TILDE
127	^? DEL	DELETE

ASCII code table including entity references, control codes and Unicode names (1.1) © Tom Gibara July 2014