Computer
I mean actually!!

By CED student

X%

THis is stat of number of CS students who dont know what a computer **actually** is, you shouldn't be adding to this !

Lets just say you know nothing about a computer :P
Reset whatever you know for an hr!

Then What

Whats a computer

Anything and everything which can compute something.

WHAAAT!!

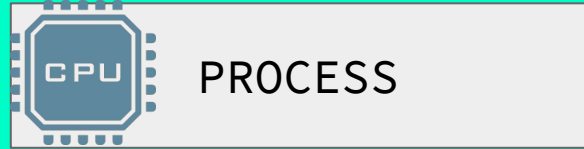So u see defining computer itself isn't simple imagine understanding:P

COMPuter in 3 Golden words :P

SOFTWARE

HIgh Level Term

HARDWARE

What makes a computer A computer

INPUT

STORE

PROCESS

OUTPUT

Input

- How does the computer understand what we are telling it to do.
- When we send in an input using any of the input devices the computer first converts it into the the language it understands.
- And that is nothing but **BINARY.**
- Lets try some binary stuff!

An intro to system language

Look at the board:P

Dec	Char		Dec	Char	Dec	Char	Dec	Char
0	NUL	(null)	32	SPACE	64	@	96	`
1	SOH	(start of heading)	33	!	65	A	97	a
2	STX	(start of text)	34	"	66	B	98	b
3	ETX	(end of text)	35	#	67	C	99	c
4	EOT	(end of transmission)	36	$	68	D	100	d
5	ENQ	(enquiry)	37	%	69	E	101	e
6	ACK	(acknowledge)	38	&	70	F	102	f
7	BEL	(bell)	39	'	71	G	103	g
8	BS	(backspace)	40	(	72	H	104	h
9	TAB	(horizontal tab)	41	)	73	I	105	i
10	LF	(NL line feed, new line)	42	*	74	J	106	j
11	VT	(vertical tab)	43	+	75	K	107	k
12	FF	(NP form feed, new page)	44	,	76	L	108	l
13	CR	(carriage return)	45	-	77	M	109	m
14	SO	(shift out)	46	.	78	N	110	n
15	SI	(shift in)	47	/	79	O	111	o
16	DLE	(data link escape)	48	0	80	P	112	p
17	DC1	(device control 1)	49	1	81	Q	113	q
18	DC2	(device control 2)	50	2	82	R	114	r
19	DC3	(device control 3)	51	3	83	S	115	s
20	DC4	(device control 4)	52	4	84	T	116	t
21	NAK	(negative acknowledge)	53	5	85	U	117	u
22	SYN	(synchronous idle)	54	6	86	V	118	v
23	ETB	(end of trans. block)	55	7	87	W	119	w
24	CAN	(cancel)	56	8	88	X	120	x
25	EM	(end of medium)	57	9	89	Y	121	y
26	SUB	(substitute)	58	:	90	Z	122	z
27	ESC	(escape)	59	;	91	[	123	{
28	FS	(file separator)	60	<	92	\	124		
29	GS	(group separator)	61	=	93	]	125	}
30	RS	(record separator)	62	>	94	^	126	~
31	US	(unit separator)	63	?	95	_	127	DEL

SOME System Language numbers (no you don't have to store them in your memory!!)

Storing

- Where does all the info we give to the computer go?
- Is all the information discarded?

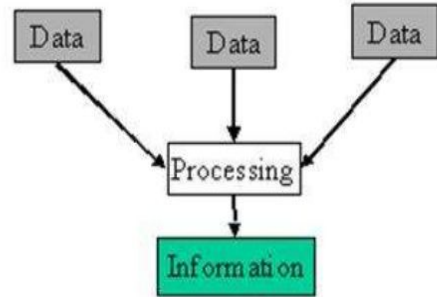## Its all stored in something called "memory"

- Its stored some complex and simple manner in things like **hard disks etc.** we wont get into that now
- But yes things get saved/stored some where so that you dont need to give the same stuff again and again
- All this something is called **DATA**.

```
0100010001000001010101010001000001
```

Processing

- OK the data is stored so what!?
- You see this data is all given in haphazard manner so the computer needs to process it do some stuff on it and convert it into actual thing that is relevant .
- This actual thing is called **INFORMATION**.
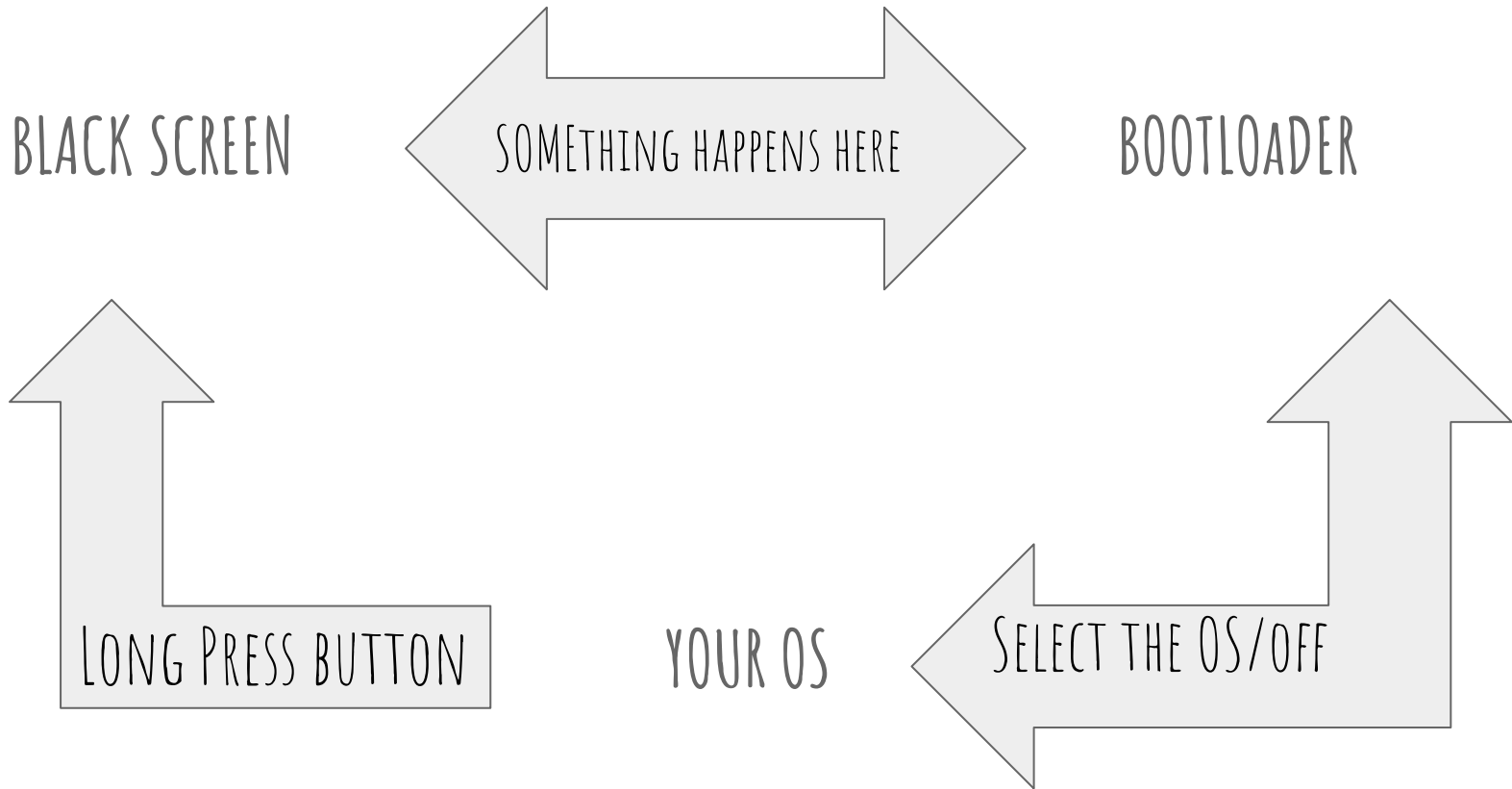
Information is created from data

01001001 01001110 01000110 01001111

OUTPUT

- We have now processed the data into information.
- Now this information is useful, the computer can use it in any form to show us anything!

INFO

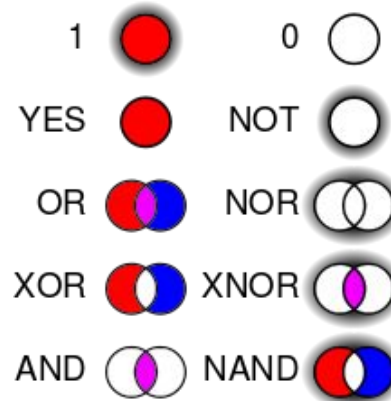# What happens when I click the power button

BLACK SCREEN

SOMEthing happens here

BOOTLOADER

Long Press button

YOUR OS

Select the OS/off

Lets See it actually

Can you classify what we saw into the 4 phases?

Let's get into some logic stuff!!

1	🔴	0	⚪
YES	🔴	NOT	⚪
OR	🔴🔵	NOR	⚪⚪
XOR	🔴⚪🔵	XNOR	⚪🟣⚪
AND	⚪🟣⚪	NAND	🔴🔵

SIMPLE?

LET me show you how this can become a little complex when it comes to computers!!:P

They Say that you can make a whole computer with just the help of nand gates!?

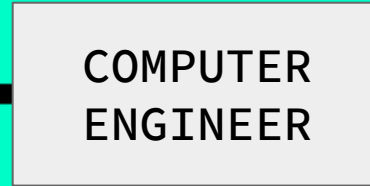"Software is a gas, it fills the container.
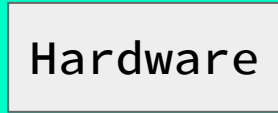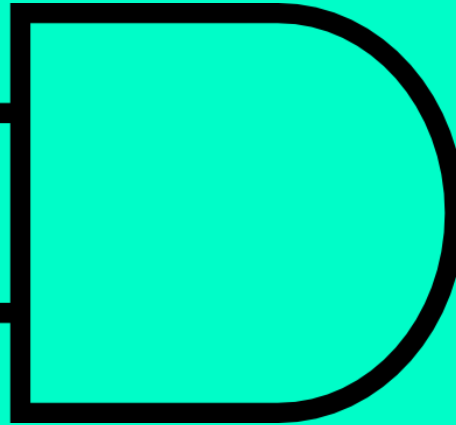Lets just say ,that container, is hardware "

– me:P(second line at least)

TIP

Ask what happens why it happens.

And try answering that question!!

THANKS
Crazy:P