

CSE29 - Sys Prog. + Software Tools

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<https://ucsd-cse29.github.io/wi26/>

"Social Learning" - Lecture, Lab, Discussion

Exams - scheduling TBD (testing center)

Assignments - 5 assignments

- problem set	Mon Wk 3
- project	Thu Wk 4
- written design	Thu Wk 6
qs	Thu Wk 8
	Thu Wk 10

```

1 #include <stdio.h>
2
3 int main() {
4     char capital_a = 'A';
5     char sixty_five = 65;
6
7     printf("capital_a: %c %d\n", capital_a, capital_a);
8     printf("sixty_five: %c %d\n", sixty_five, sixty_five);
9 }

```

format as character (ASCII)

decimal format

no return stmt!

```

$ gcc bits.c -o bits
$ ./bits
capital_a: A 65
sixty_five: A 65

```

How to get a type error?

Could we have written

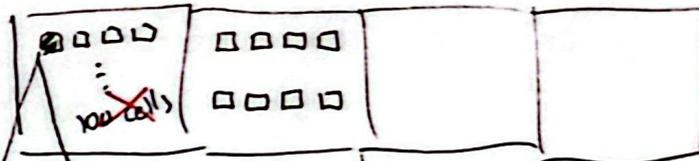
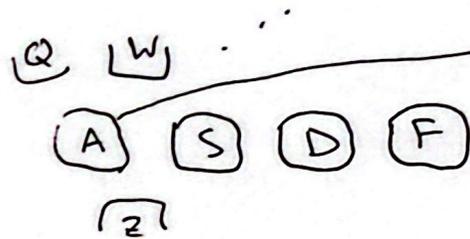
"capital_a: " + capital_a + " " + capital_a

No string ~~concat~~ concat w/ plus
(this is error)

ASCII Table

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

last few typed keys

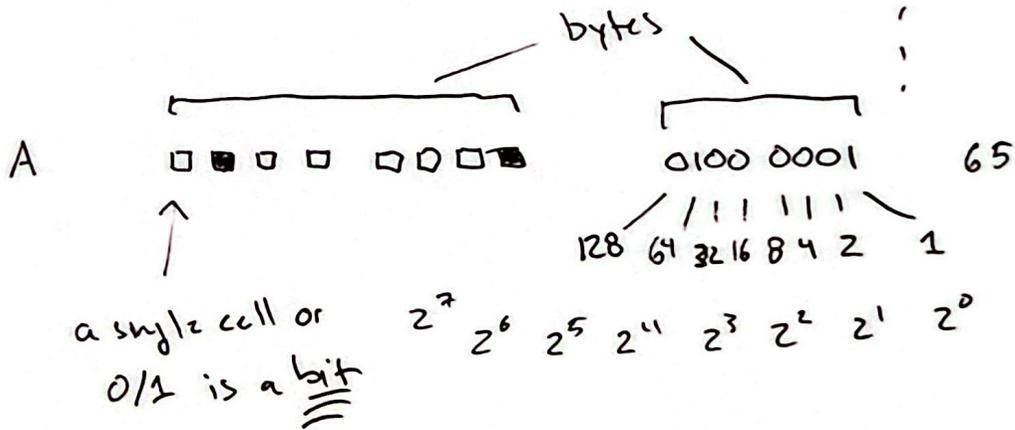


SRAM cells



small
reliable
cheap
fast

8 SRAM cells per
character/key



For Answer 2:

What is the binary
representation of 'A'?