

Memory address	label	Data (4 bytes)	Data in hex
0x10000020	a	42	0x00 00 00 2A
0x10000024	b	?	0x? ? ? ?
0x10000028	c	a b c d	0x 61 62 63 64
0x1000002C		e \0 ? ?	0x 65 00 ? ?
0x10000030	d	1 2 3 4	0x01 02 03 04
0x10000034	e	1	0x00 00 00 01
		2	0x00 00 00 02
		3	0x00 00 00 03
		4	0x00 00 00 04
	f:	?? // // // //	0x?? // // //
0x10010004	bb	666	0x00 00 02 9A

.align n

2^n

given n = 2, then we align to a multiple 2^2=4

Q2.

```

.data
u:
.space 4
v:
.word 42
w:
.space 1
x:
.byte 'a'
y:
.space 8
z:
.space 80

```

Q3.

a. \$t0 <- 0x10010000

b. \$t0 <- 666

c. \$t0 <- 00

d. \$t0 <- 666

e. \$t1 <- 0x10010008

\$t0 <- 1

f. \$t1 <- 0x10010008

0x10010008

+ 8

0x10010010

\$t0 <- 5

g. \$t1 <- 8

\$t0 <- 5

h. \$t1 <- 0x10010008

\$t0 <- 0x 00 01 00 00

adress	label	data	hex
0x10010008	cc:	1	0x 00 00 00 01
1001000C		3	00 00 00 03
0x10010010		5	00 00 00 05
0x10010014		7	00 00 00 07