

1.)

<pre>1 ORG 0 2 3 MOV A, #0 4 5 ;ADD A, #1 6 7 JZ ZERO 8 JNZ NOTZERO 9 10 ZERO: 11 JNC HASNOCARRY 12 13 NOTZERO: 14 JC HASCARRY 15 16 HASCARRY: 17 MOV R1, #1H 18 JMP EXIT 19 20 HASNOCARRY: 21 MOV R1, #0H 22 JMP EXIT 23 24 EXIT: 25 END</pre>	<pre>1 ORG 0 2 3 MOV A, #254 4 5 ADD A, #1 6 7 JZ ZERO 8 JNZ NOTZERO 9 10 ZERO: 11 JNC HASNOCARRY 12 13 NOTZERO: 14 JC HASCARRY 15 16 HASCARRY: 17 MOV R1, #1H 18 JMP EXIT 19 20 HASNOCARRY: 21 MOV R1, #0H 22 JMP EXIT 23 24 EXIT: 25 END</pre>
---	--

	x0	x1	x2	x3	x4	x5	x6	x7
00	00	01	00	00	00	00	00	00
08	00	00	00	00	00	00	00	00
10	00	00	00	00	00	00	00	00
18	00	00	00	00	00	00	00	00
20	00	00	00	00	00	00	00	00

	HEX	DEC	BIN	OCT	CHAR
A:	FF	255	11111111	377	
B:	00	0	00000000	0	

2.)

```
1 ORG 0
2
3 MOV 10H, #100
4 MOV A, 10H
5 MOV B, #2
6
7 DIV AB
8 MOV A, B
9
10 JZ ISEVEN
11 JNZ ISODD
12
13
14 ISEVEN:
15 MOV R7, #0F0H
16 JMP EXIT
17
18 ISODD:
19 MOV R7, #0FH
20 JMP EXIT
21
22 EXIT:
23 END
```

	x0	x1	x2	x3	x4	x5	x6	x7	
00	00	00	00	00	00	00	00	F0	
08	00	00	00	00	00	00	00	00	
10	64	00	00	00	00	00	00	00	
18	00	00	00	00	00	00	00	00	
20	00	00	00	00	00	00	00	00	
28	00	00	00	00	00	00	00	00	
30	00	00	00	00	00	00	00	00	
38	00	00	00	00	00	00	00	00	
40	00	00	00	00	00	00	00	00	

0

1

2

3

4

5

6

7

HEX DEC BIN OCT CHAR

A: 00 0 00000000 0

B: 00 0 00000000 0

PSW: C AC F0 RS1 RS0 OV - P

R7 R6 R5 R4 R3 R2 R1 R0

F0 00 00 00 00 00 00 00

3.)

```

1 ORG 0
2
3 MOV 10H, #1
4
5 MOV R0, #10H
6 MOV R1, #17
7 MOV B, R0;
8
9 INPUT:
10 ADD A, B
11 MOV @R0, A
12 MOV B, R0
13 INC R0
14 DJNZ R1, INPUT
15
16 MOV R0, #10H
17 MOV R1, #17
18 CLR A
19
20 ADD:
21 ADD A, @R0
22 INC R0
23 DJNZ R1, ADD
24
25 END

```

Simulator C variables IO Ports Messages Notes

	x0	x1	x2	x3	x4	x5	x6	x7
00	21	00	00	00	00	00	00	00
08	00	00	00	00	00	00	00	00
10	10	20	31	43	56	6A	7F	95
18	AC	C4	DD	F7	12	2E	4B	69
20	88	00	00	00	00	00	00	00
28	00	00	00	00	00	00	00	00
30	00	00	00	00	00	00	00	00
38	00	00	00	00	00	00	00	00
40	00	00	00	00	00	00	00	00

HEX DEC BIN OCT CHAR

A: 38 56 00111000 70 8

B: 20 32 00100000 40

PSW: C AC F0 RS1 RS0 OV - P

R7 R6 R5 R4 R3 R2 R1 R0

00 00 00 00 00 00 00 21