NAME: MOHSIN ALI

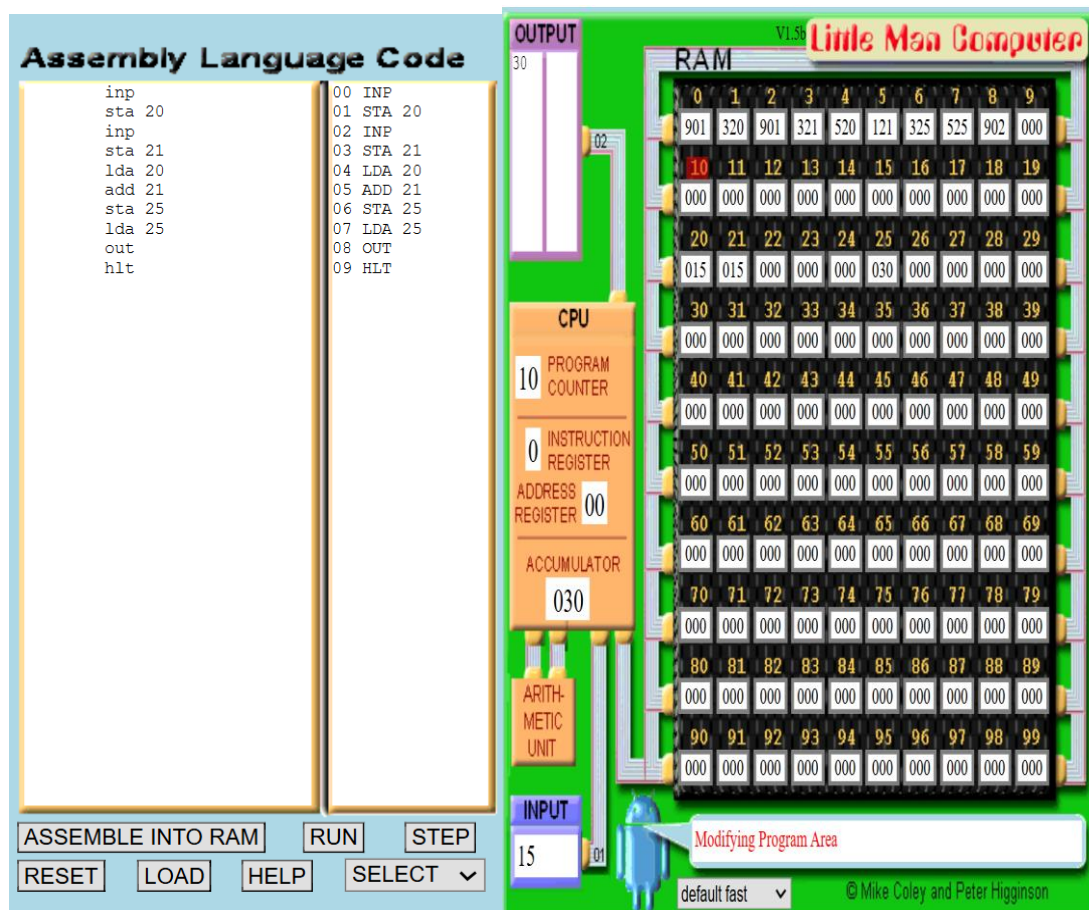**Roll Number: 25P-0545**

Section: BCS-1C

LAB TASK 03

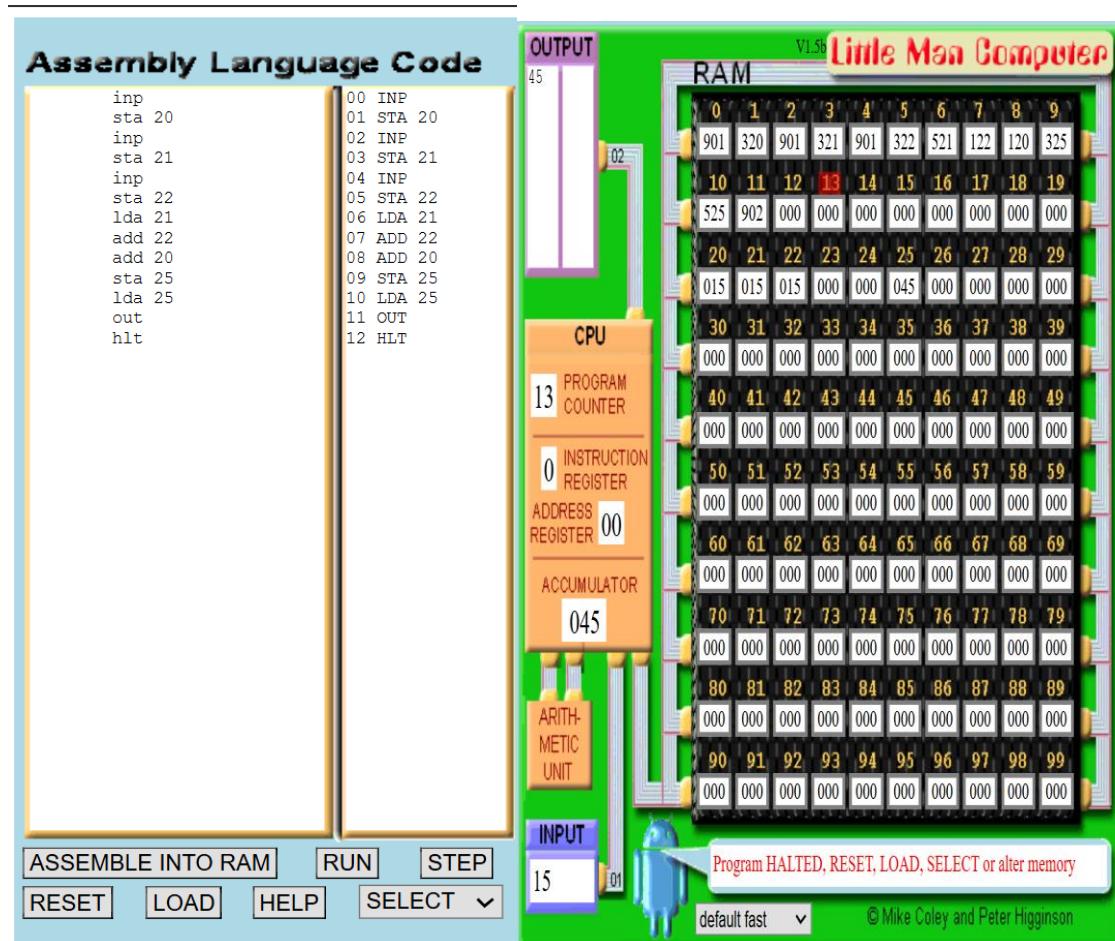Introduction to Information and Communication Technology

Sir Zakria Bacha

Task 1 - Adding Two Numbers (Little Man Computer

1. Ask the user to enter the first number.

2. Ask the user to enter the second number.

3. Add the two numbers together.

4. Store the result in a third variable.

5. Finally, show the result (output) on the screen.

Task 2 – Adding Three Numbers (Little Man Computer – LMC)

1. Ask the user to enter the first number.

2. Ask the user to enter the second number.

3. Ask the user to enter the third number.

4. Add all three numbers together.

5. Store the result in a separate variable.

6. Finally, show the result (output) on the screen.

Assembly Language Code

```
inp          00 INP
sta 20       01 STA 20
inp          02 INP
sta 21       03 STA 21
inp          04 INP
sta 22       05 STA 22
lda 21       06 LDA 21
add 22       07 ADD 22
add 20       08 ADD 20
sta 25       09 STA 25
lda 25       10 LDA 25
out          11 OUT
hlt          12 HLT
```

ASSEMBLE INTO RAM   RUN   STEP

RESET   LOAD   HELP   SELECT ⌄

OUTPUT
45

Little Man Computer

V1.5b

RAM

0	1	2	3	4	5	6	7	8	9
901	320	901	321	901	322	521	122	120	325

10	11	12	13	14	15	16	17	18	19
525	902	000	000	000	000	000	000	000	000

20	21	22	23	24	25	26	27	28	29
015	015	015	000	000	045	000	000	000	000

30	31	32	33	34	35	36	37	38	39
000	000	000	000	000	000	000	000	000	000

40	41	42	43	44	45	46	47	48	49
000	000	000	000	000	000	000	000	000	000

50	51	52	53	54	55	56	57	58	59
000	000	000	000	000	000	000	000	000	000

60	61	62	63	64	65	66	67	68	69
000	000	000	000	000	000	000	000	000	000

70	71	72	73	74	75	76	77	78	79
000	000	000	000	000	000	000	000	000	000

80	81	82	83	84	85	86	87	88	89
000	000	000	000	000	000	000	000	000	000

90	91	92	93	94	95	96	97	98	99
000	000	000	000	000	000	000	000	000	000

CPU

13   PROGRAM COUNTER

0   INSTRUCTION REGISTER

ADDRESS REGISTER   00

ACCUMULATOR
045

ARITH-METIC UNIT

INPUT
15

Program HALTED, RESET, LOAD, SELECT or alter memory

default fast ⌄   © Mike Coley and Peter Higginson

Task 3 – Subtracting Two Numbers (Little Man Computer – LMC)

1. Ask the user to enter the first number.

2. Ask the user to enter the second number.

3. Store first number in location 20 And Second number in location 25

4. Load both numbers from the memory location

5. Subtract the two numbers together.

6. Store the result in a third variable.

7. Finally, show the result (output) on the screen.