

Bahria University,

Karachi Campus



COURSE: CSL – 220

COMPUTER ARCHITECTURE AND LOGIC DESIGN LAB

TERM: FALL 2025 – CLASS: BSE – 3B

Submitted By:

Muhammad Abdullah

02-131242-070

Submitted To:

Engr. Noor Us Sabah

Signed:

Remarks:

Score:

INDEX

[illegible]

Bahria University,

Karachi Campus



LAB EXPERIMENT NO : 01

LIST OF TASKS

TASK NO	OBJECTIVE
01	<p>Write the following tasks in VVM Assembly Language program as well as VVM Machine Language format:</p> <ul style="list-style-type: none">• Take two inputs from the user and subtract the first one from the other.• Take three (any) hardcoded values and add them together.• Take two inputs from the user, add them together and then subtract 100 from it.• Take three inputs from the user. Add the first two inputs together and then subtract the third input from the result.• Take one input from the user, subtract 50 from it, and then double the result by adding the result to itself.

Submitted on:

11 September 2025

Task 1:

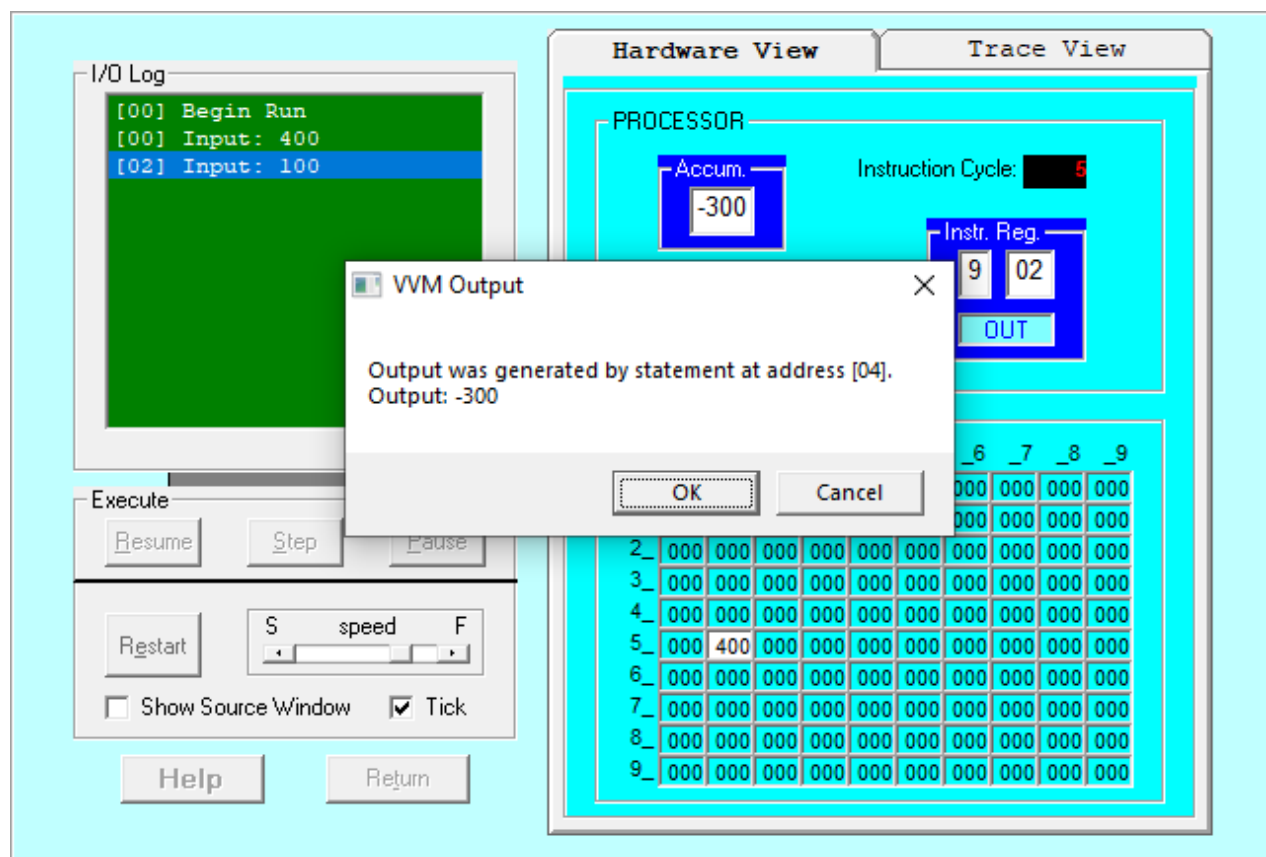
Write the following tasks in VVM Assembly Language program as well as VVM Machine Language format:

- Take two inputs from the user and subtract the first one from the other.

Solution :

IN	901
STO 51	351
IN	901
SUB 51	251
OUT	902
HLT	000

Output :

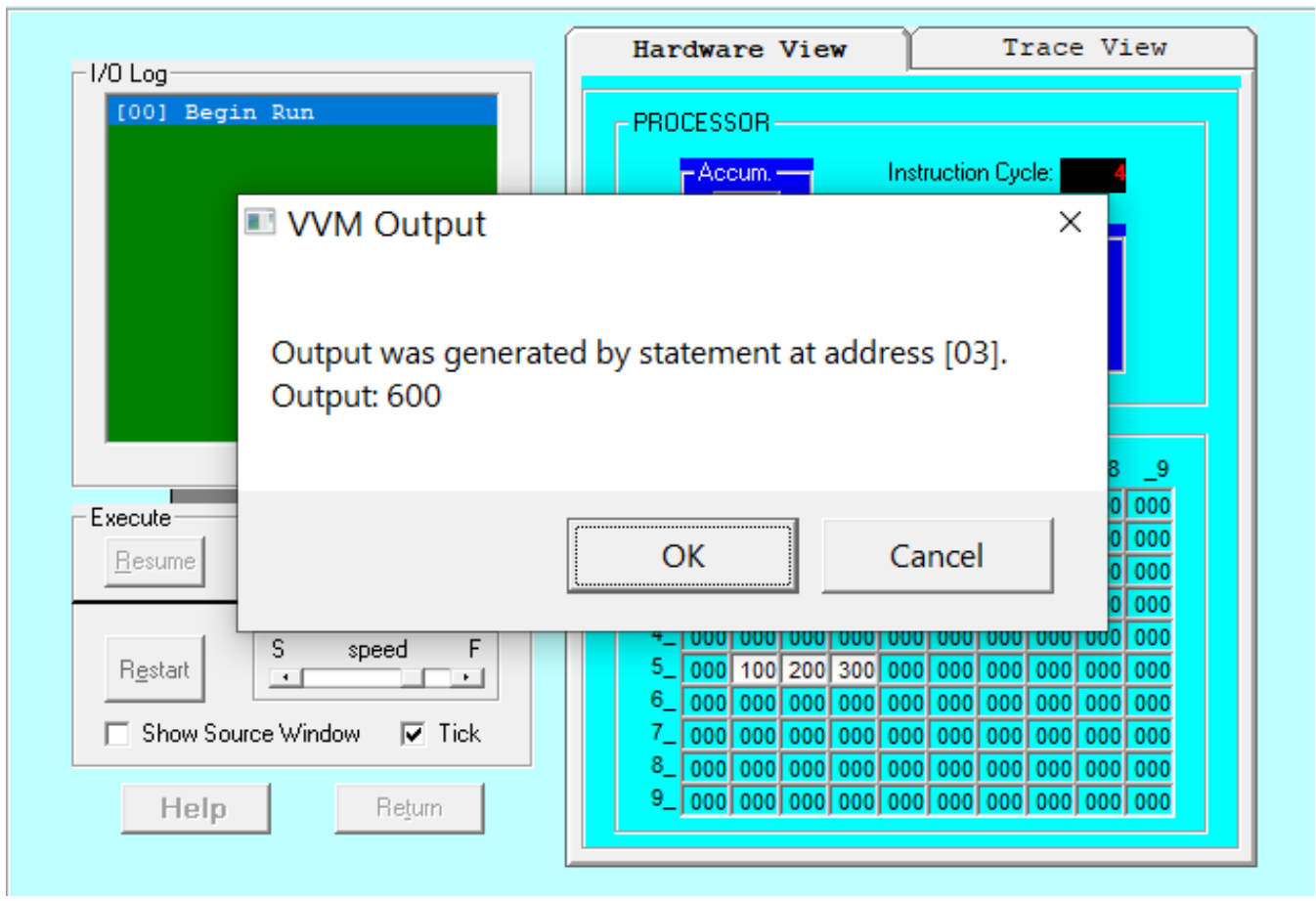


- Take three (any) hardcoded values and add them together.

Solution :

LDA 51	551
ADD 52	152
ADD 53	153
OUT	902
HLT	000
*51	*51
DAT 100	100
*52	*52
DAT 200	200
*53	*53
DAT 300	300

Output :

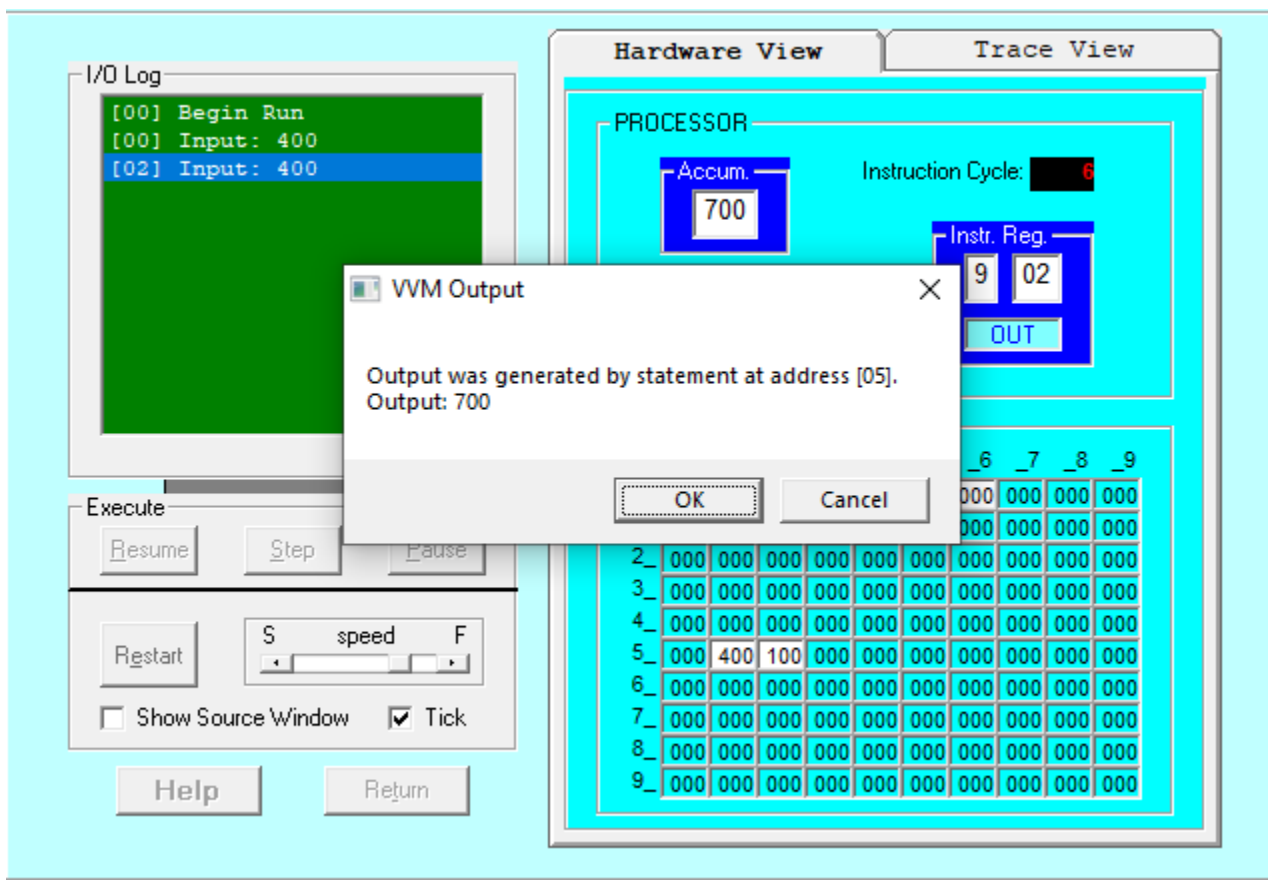


- Take two inputs from the user, add them together and then subtract 100 from it.

Solution :

IN	901
STO 51	351
IN	901
ADD 51	151
SUB 52	252
OUT	902
HLT	000
*52	*52
DAT 100	100

Output :

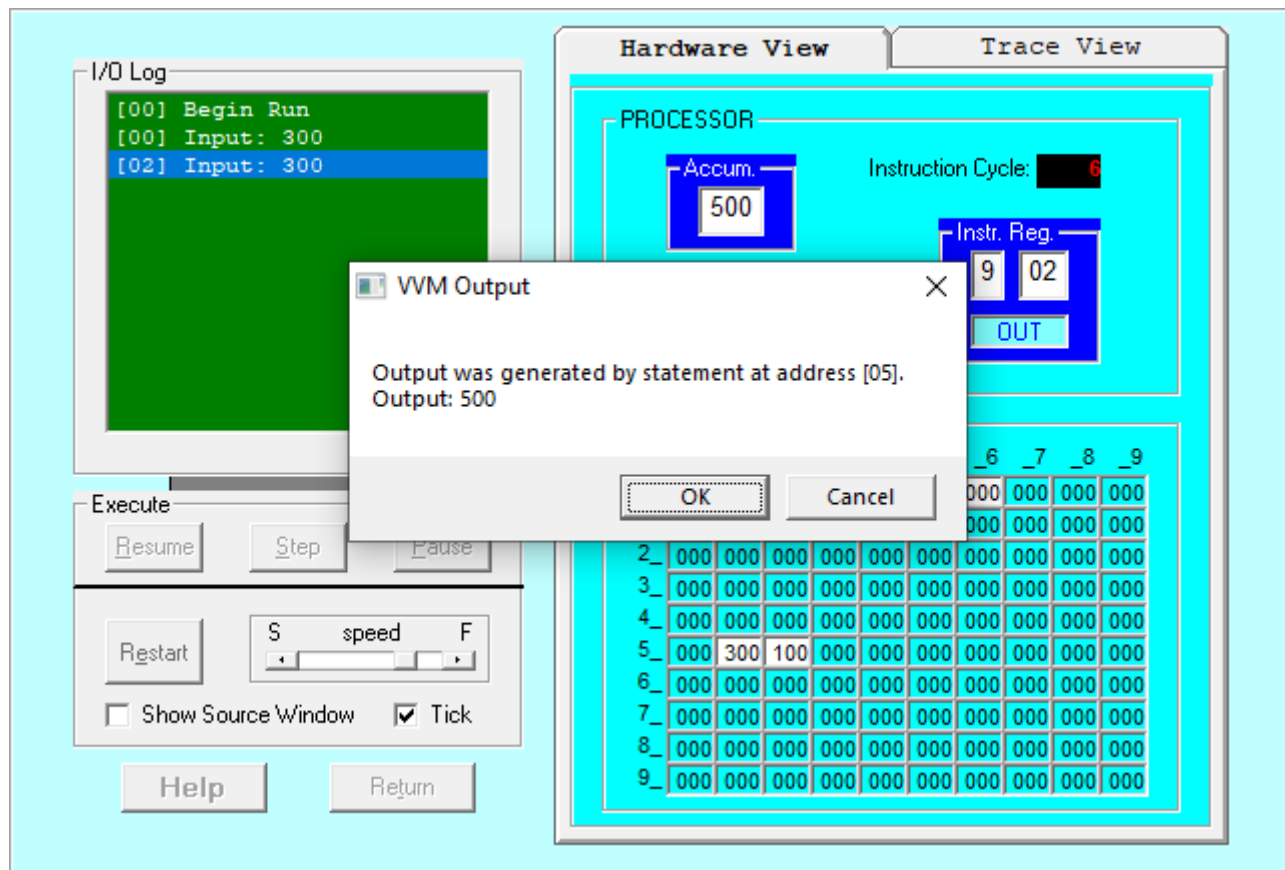


- Take three inputs from the user. Add the first two inputs together and then subtract the third input from the result.

Solution :

IN	901
STO 51	351
IN	901
ADD 51	151
SUB 52	252
OUT	902
HLT	000
*52	*52
DAT 100	100

Output :



- Take one input from the user, subtract 50 from it, and then double the result by adding the result to itself.

Solution :

IN	901
SUB 51	251
STO 52	352
LDA 52	552
ADD 52	152
OUT	902
HLT	000
*51	*51
DAT 050	050

Output :

