

Name: Aleena Saeed

Semester: BSCS-4

Course Title: CA LAB-10

SAP ID: 56270

Practice Task:

Data
Dec

Registers

Name	Width	Data
AC	16	0
AR	12	-2048
DR	16	-2048
E	1	0
I	1	0
IR	16	-2048
PC	12	1
S	1	0

W1-0.a Xmul.a X

```

1  START:
2  INP
3  STA NUM
4  INP
5  MULTIPLY NUM
6  OUT
7  HLT
8
9  NUM: .data 1 0
10 NUM2: .data 1 0
11

```

```

EXECUTING...
Enter Inputs, the first of which must be an Integer: 4
Enter Inputs, the first of which must be an Integer: 6
Output:  24
Enter Inputs, the first of which must be an Integer:

```

TASK-1:

Data
Dec

Registers

Name	Width	Data
AC	16	0
AR	12	-2048
DR	16	-2048
E	1	0
I	1	0
IR	16	-2048
PC	12	1
S	1	0

W1-0.a X or.a X NAND.c

```

1 START:
2 INP
3 STA NUM
4 INP
5 OR NUM
6 OUT
7 HLT
8
9 NUM: .data 1 0
10 NUM2: .data 1 0
11

```

EXECUTING...

Enter Inputs, the first of which must be an Integer: 0

Enter Inputs, the first of which must be an Integer: 0

Output: 0

Enter Inputs, the first of which must be an Integer:



TASK-2:

DataDec

Registers

Name	Width	Data
AC	16	24576
AR	12	-2048
DR	16	-2048
E	1	0
I	1	0
IR	16	-2048
PC	12	1
S	1	0

W1-0.a × or.a × NAND.c

```
1 START:
2 INP
3 STA NUM
4 INP
5 NAND NUM
6 OUT
7 HLT
8
9 NUM: .data 1 0
10 NUM2: .data 1 0
11
```

EXECUTING...
Enter Inputs, the first of which must be an Integer: 0
Enter Inputs, the first of which must be an Integer: 0
Output: -1
Enter Inputs, the first of which must be an Integer:

TASK-3:

File
Edit
Modify
Execute
Help

Data
Dec

Registers

Name	Width	Data
AC	16	24576
AR	12	-2048
DR	16	-2048
E	1	0
I	1	0
IR	16	-2048
PC	12	1
S	1	0

W1-0.a X
ora X
NAND

```

1  START:
2  INP
3  STA NUM
4  INP
5  NOR NUM
6  OUT
7  HLT
8
9  NUM: .data 1 0
10 NUM2: .data 1 0
11

```

EXECUTING...
Enter Inputs, the first of which must be an Integer: 0
Enter Inputs, the first of which must be an Integer: 1
Output: -2
Enter Inputs, the first of which must be an Integer:

TASK-4:

ata

Dec

W1-0.a X

or.a X

NAND.cpu

registers

Name	Width	Data
:	16	0
t	12	-2048
t	16	-2048
	1	0
	1	0
t	16	-2048
:	12	1
	1	0

```
1 START:
2 INP
3 STA NUM
4 INP
5 XOR NUM
6 OUT
7 HLT
8
9 NUM: .data 1 0
10 NUM2: .data 1 0
11
```

ECUTING...
ter Inputs, the first of which must be an Integer: 1
ter Inputs, the first of which must be an Integer: 0
tput: 1
ter Inputs, the first of which must be an Integer:

TASK-5:

Data
Dec

Registers

Name	Width	Data
AC	16	24576
AR	12	875
DR	16	-2048
E	1	0
I	1	0
IR	16	0
PC	12	1029
S	1	0

W1-0.a X ora X NAND

```

1 START:
2 INP
3 STA NUM
4 NOT NUM
5 OUT
6 HLT
7
8 NUM: .data 1 0
9
10

```

EXECUTING...

Enter Inputs, the first of which must be an Integer: 0

Output: -1

Enter Inputs, the first of which must be an Integer:



Type here to search

