Name: Muhammd Sherjeel Akhtar

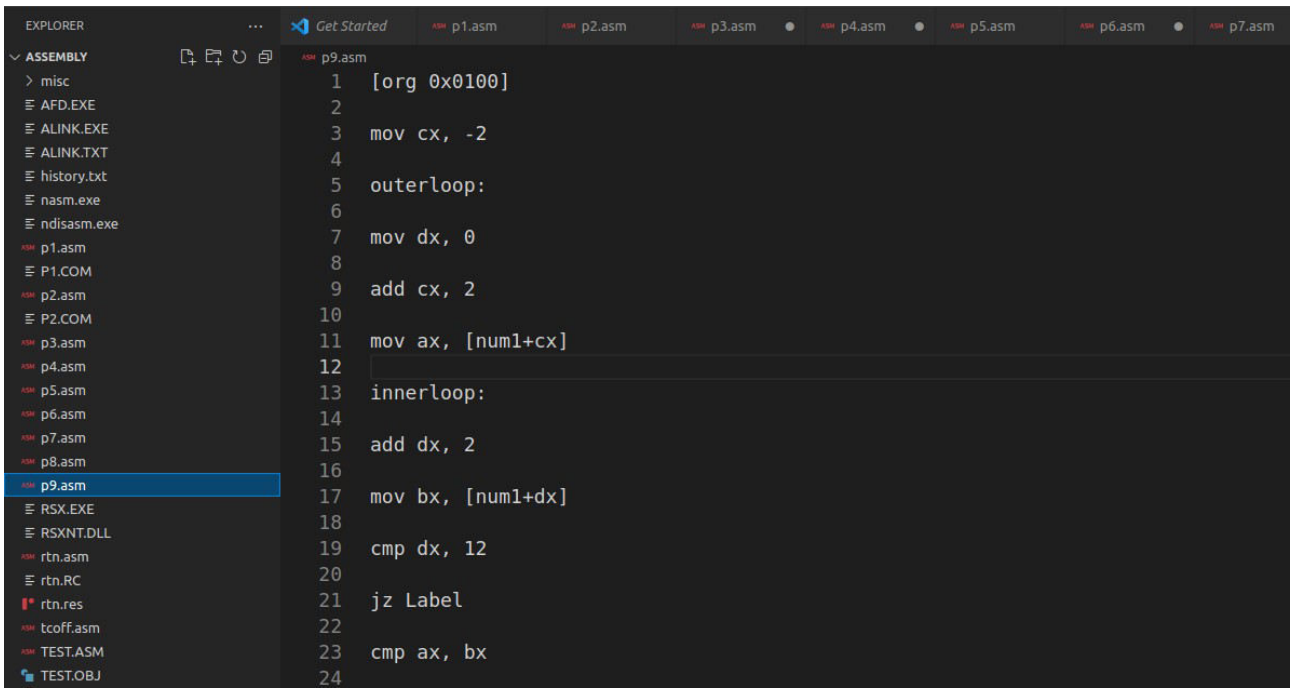
Roll **N**o: 20P-0101

Home Work **N**o: 1

Subject: COAL LAB

Submitted **T**o **R**espected **S**ir:

Khurram Shahzad




```
1  [org 0x0100]
2
3  mov cx, -2
4
5  outerloop:
6
7  mov dx, 0
8
9  add cx, 2
10
11 mov ax, [num1+cx]
12
13 innerloop:
14
15 add dx, 2
16
17 mov bx, [num1+dx]
18
19 cmp dx, 12
```

```
14
15  add dx, 2
16
17  mov bx, [num1+dx]
18
19  cmp dx, 12
20
21  jz Label
22
23  cmp ax, bx
24
25  jnc innerloop
26
27  Label:
28
29  cmp cx, 12
```

\

```
23  cmp ax, bx
24
25  jnc innerloop
26
27  Label:
28
29  cmp cx, 12
30
31  jnz outerloop
32
33  mov [result], ax
34
35  num1: dw 2,0,0,1,0,1
36
```

Before start of program:

```
14
15  add dx, 2
16
17  mov bx, [num1+dx]
18
19  cmp dx, 12
20
21  jz Label
22
23  cmp ax, bx
24
25  jnc innerloop
26
27  Label:
28
29  cmp cx, 12
30
31  jnz outerloop
32
33  mov [result], ax
34
35  num1: dw 2,0,0,1,0,1
36
```

```
2          3  4  5  6  7  8  9  A   B  C  D  E  F  0  1  2
DS:0103   00 00 02 00 00 00 00 00  01 00 00 00 01 00 A1 05  ........ ......í.
DS:0113   01 BB 00 00 B9 0A 00 81  C3 02 00 3B 87 05 01 73  .╗..╣..ü ├..;ç..s
DS:0123   F6 A3 03 01 B8 00 4C CD  21 D8 01 C3 8B 07 8B 57  ÷ú..╕.L= !╪.├ï.ïW
DS:0133   02 85 D2 75 04 85 C0 74  1C C7 46 DC 00 00 8E 5E  .à╥u.à└t .╟F▄..Ä^
DS:0143   FC 83 7D 0E 00 74 09 8B  46 F2 48 3B 46 F6 7E 08  ⁿâ}..t.ï F²H;F÷~.

1 Step  2ProcStep 3Retrieve 4Help ON  5BRK Menu 6       7 up  8 dn  9 le 10 ri
```

After Storing the highest no: Which is 2 in 20P-0101

```
14
15  add dx, 2
16
17  mov bx, [num1+dx]
18
19  cmp dx, 12
20
21  jz Label
22
23  cmp ax, bx
24
25  jnc innerloop
26
27  Label:
28
29  cmp cx, 12
30
31  jnz outerloop
32
33  mov [result], ax
34
35  num1: dw 2,0,0,1,0,1
36
```

```
2          3  4  5  6  7  8  9  A   B  C  D  E  F  0  1  2
DS:0103   02 00 02 00 00 00 00 00  01 00 00 00 01 00 A1 05  ........ ......í.
DS:0113   01 BB 00 00 B9 0A 00 81  C3 02 00 3B 87 05 01 73  .╗..╣..ü ├..;ç..s
DS:0123   F6 A3 03 01 B8 00 4C CD  21 D8 01 C3 8B 07 8B 57  ÷ú..╕.L= !╪.├ï.ïW
DS:0133   02 85 D2 75 04 85 C0 74  1C C7 46 DC 00 00 8E 5E  .à╥u.à└t .╟F▄..Ä^
DS:0143   FC 83 7D 0E 00 74 09 8B  46 F2 48 3B 46 F6 7E 08  ⁿâ}..t.ï F²H;F÷~.

1 Step  2ProcStep 3Retrieve 4Help ON  5BRK Menu 6       7 up  8 dn  9 le 10 ri
```