Assignment 4
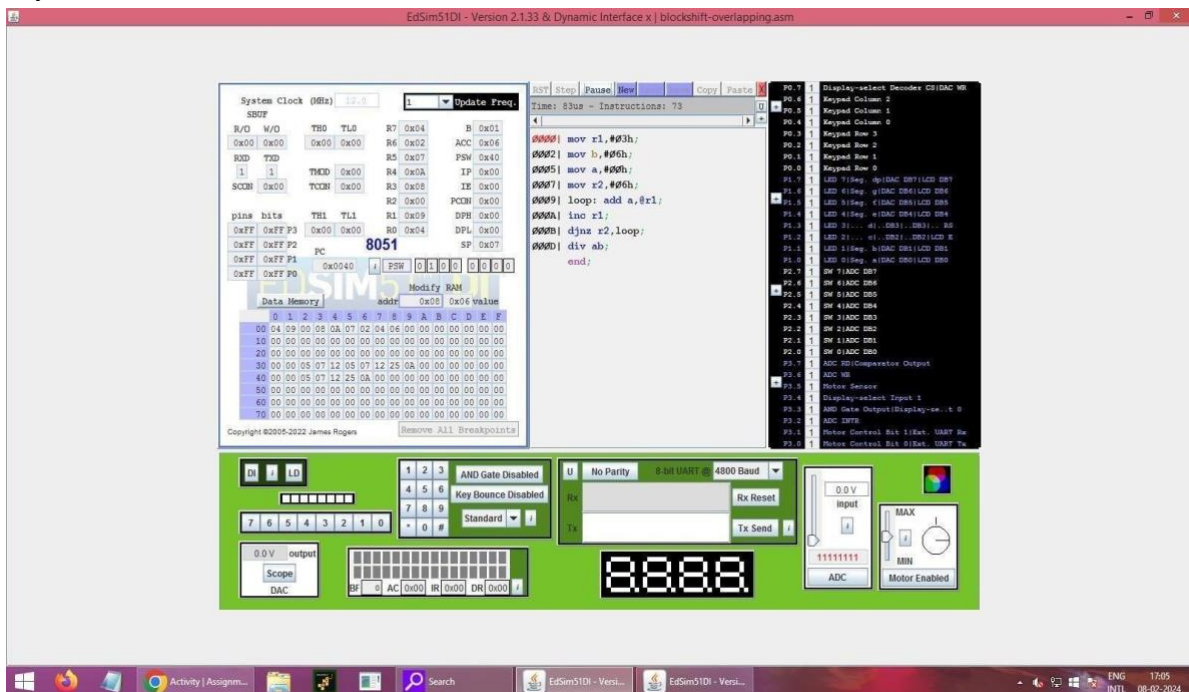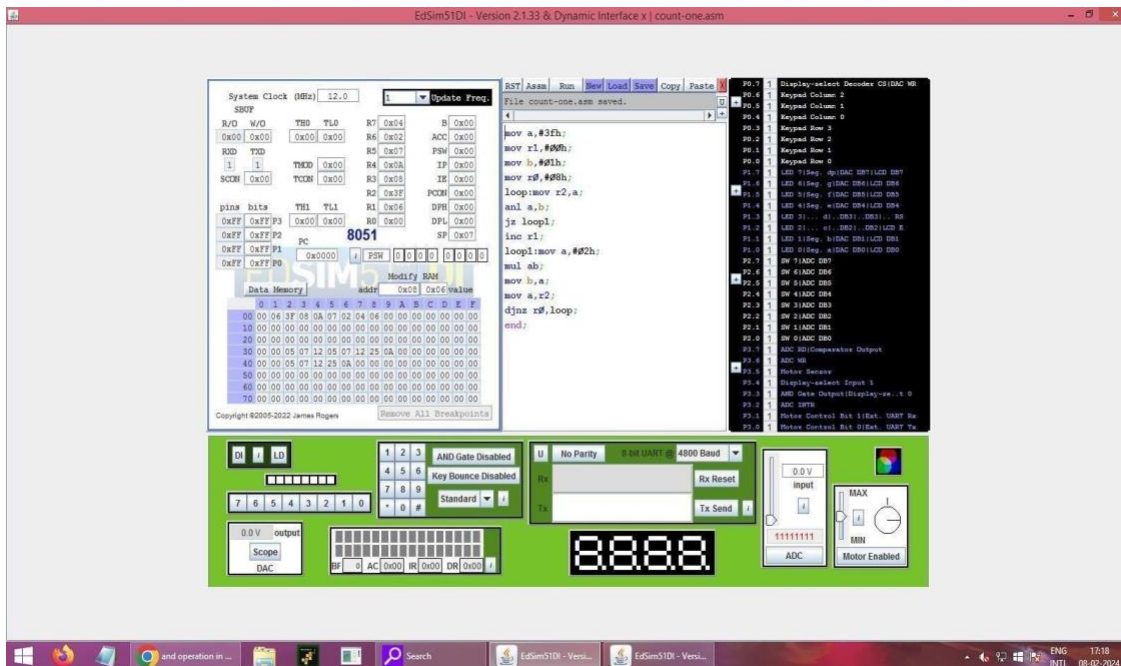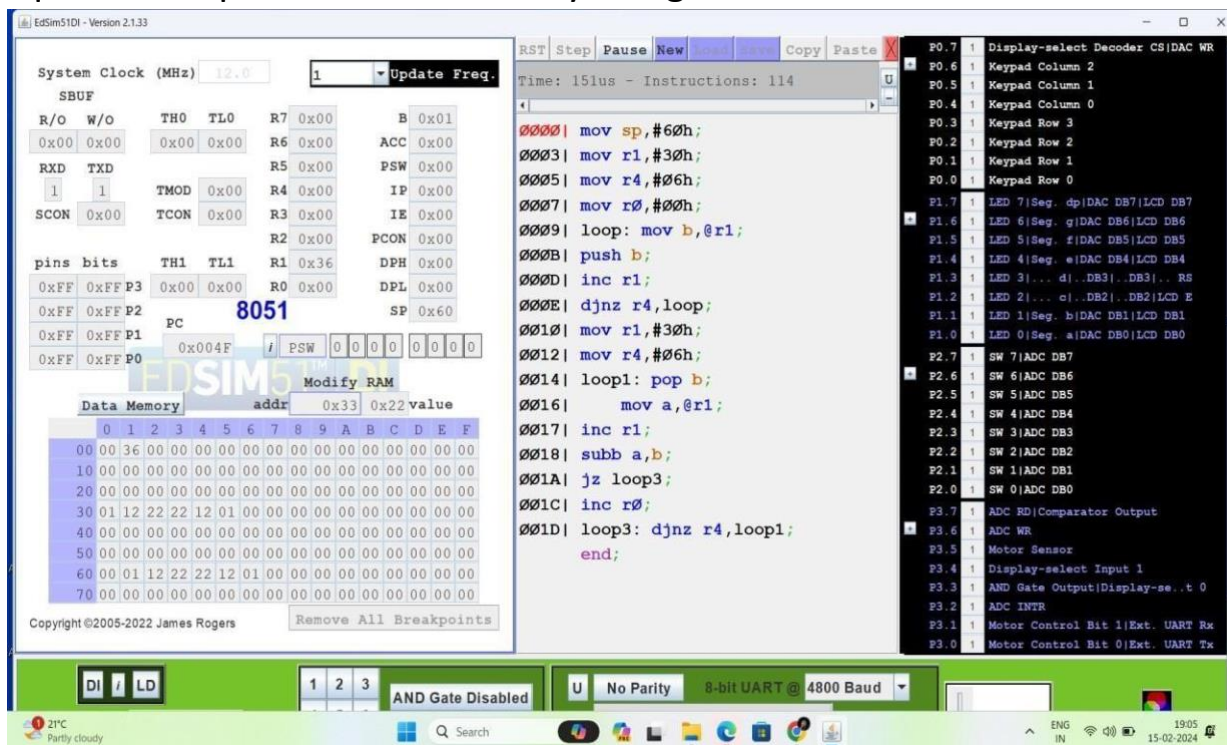
Write the assembly language program in Edsim51.

Q1.Write a assembly code to find the average of the numbers stored in a array.

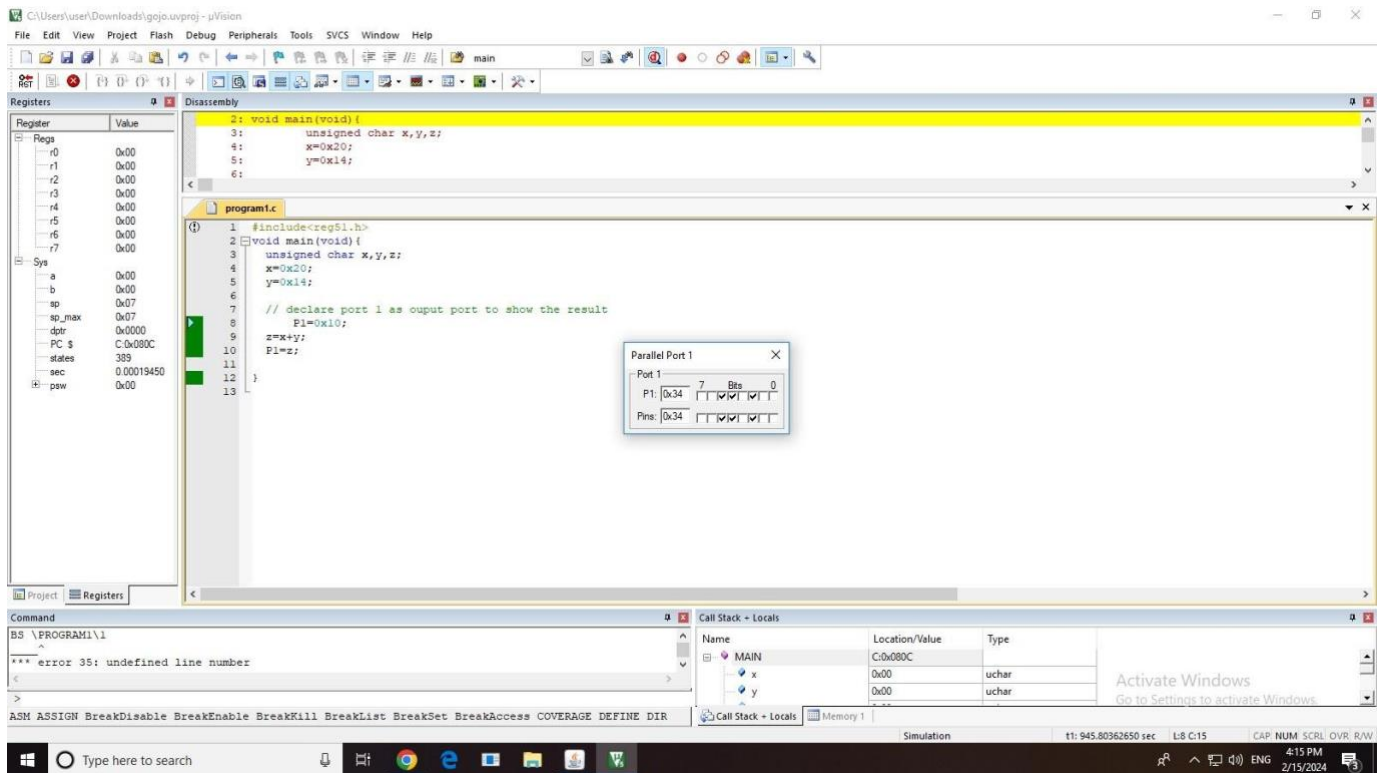Q2.Write a assembly code to find the numbers of 1's in a number and store the result in a register.

Q3. Write a assembly program to check whether the number stored in a suqueces are palindrome or not by using stack.


```
0000|  mov sp,#60h;
0003|  mov r1,#30h;
0005|  mov r4,#06h;
0007|  mov r0,#00h;
0009|  loop: mov b,@r1;
000B|  push b;
000D|  inc r1;
000E|  djnz r4,loop;
0010|  mov r1,#30h;
0012|  mov r4,#06h;
0014|  loop1: pop b;
0016|      mov a,@r1;
0017|  inc r1;
0018|  subb a,b;
001A|  jz loop3;
001C|  inc r0;
001D|  loop3: djnz r4,loop1;
        end;
```
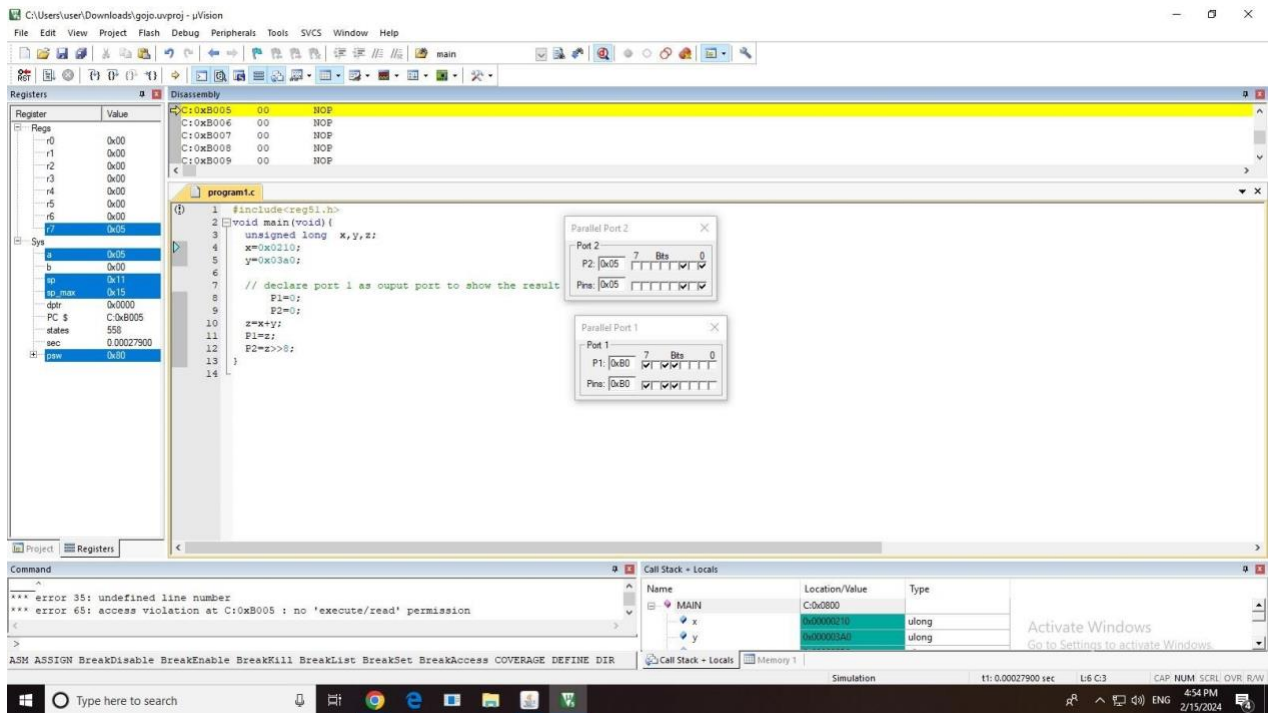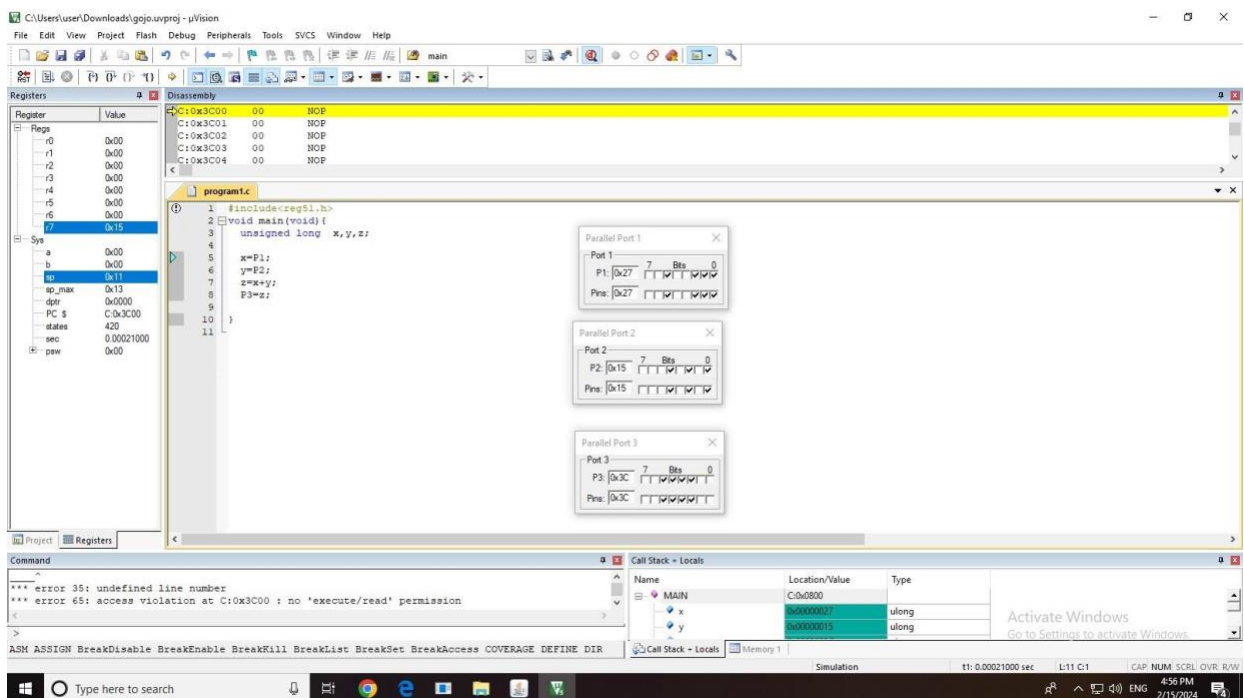
Write the C Program in Keil Embedded C:

A. Addition of two 8-bit numbers and show the output on port P1.

B. Addition of two 16-bit numbers and show the output on port P1 &P2.

C. Addition of two 8-bit numbers. Take input from port P1 & P2 and show the result on port P3.

D. Addition of two 16-bit numbers. Take input from port P1, P2 & P3, P4 and display the result on port P3 & P4.