

Task 09- Step B, A, C

- Write an assembly function code that inputs from the keyboard and return the decimal number. (Step B)

`int readnum()`

- Write an assembly function code that displays the decimal number passed by argument and return the number of chars displayed. Display '\n' at the end. (Step A)

`int printnum(num)`

- The above functions should be called from the following C code. Complete the program as follows: (Step C)

`gcc -marm -O1 -o lab9 lab9-c.c lab9-ba.s`

**** refer to Task07 ****

Task 09- C Program

- "lab9-c.c" code

```
int readnum();
int printnum(int num);

main()
{
    int a, b, c, d, e, op, res;

    a = readnum();
    b = readnum();
    c = readnum();
    d = readnum();
    e = readnum();

    op = readnum();
```

```
    switch (op) {
        case 1:
            res = a + b;
            break;
        case 2:
            res = a + b + c;
            break;
        case 3:
            res = a + b - c;
            break;
        case 4:
            res = a - b + c - d;
            break;
        default:
            res = a - b + c + d + e;
    }

    res = printnum(res);
    printnum(res);
}
```

Task 09- Assembly Program

- "lab9-ba.s" code

```
.text
.global readnum
.global printnum

readnum:
    ...
    ...

printnum:
    ...
    ...
```

- Example

```
root@debian-armhf:~/syspro/lab/lab9# lab9
12 34 56 78 90 1
46
2
root@debian-armhf:~/syspro/lab/lab9# lab9
123
234 345
456
56789
5
57479
5
```