**2024-2025** (1)

Course: Programming

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## Assignment (2)

1. Write a C program that check the number entered by a user is odd or even.

```
#include <stdio.h>
 1
 2
       #include <stdlib.h>
 3
 4
       void main()
 5
 6
           char yesOrNo;
 7
           do
 8
           {
 9
                int number;
10
                printf("Enter an number: ");
11
                scanf("%d", &number);
                if (number % 2 == 0)
12
13
                    printf("%d is even.\n", number);
14
15
16
                else
17
18
                    printf("%d is odd.\n", number);
19
20
                printf("If you want to do another operation, click (y or n)? ");
21
                scanf("%s", &yesOrNo);
22
           while(yesOrNo == 'y');
23
24
25
26
27
28
29
```

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2. Write a C program that check the number entered by a user is positive or negative.

```
#include <stdio.h>
 1
 2
       #include <stdlib.h>
 3
        // Esmail Sameh Abdo
        // 2024036792
 4
        //D6
 5
 6
       void main()
 7
 8
           char yesOrNo;
 9
           do
10
11
               int number;
               printf("Enter an number: ");
12
               scanf("%d", &number);
13
14
               if (number < 0)</pre>
15
16
                   printf("%d is Negative.\n", number);
17
               }else if(number == 0) {
                   printf("%d is not Negative or positive it's zero.\n", number);
18
19
               }else
20
21
                   printf("%d is positive.\n", number);
22
23
               printf("If you want to do another operation, click (y or n)? ");
24
               scanf("%s", &yesOrNo);
25
26
           while(yesOrNo == 'y');
27
```

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3- Write a C program to make simple calculator The program will ask the user to read two numbers and read an operation symbol (+,-,\*,/). Then the program will perform the required operation on the two numbers and print the results switch - case .

```
void main()
   char yesOrNo;
   do
    {
       double num1, num2, result;
       char ope;
       printf("Enter number one:\n ");
       scanf("%d", &num1);
       printf("Enter the operation (+ , - , x , /):\n");
       scanf("%s", &ope);
       printf("Enter number two:\n ");
       scanf("%d", &num2);
       switch (ope)
       case '+':result = num1 + num2;break;
       case '-':result = num1 - num2;break;
       case 'x':result = num1 * num2;break;
       case '/':if(num1 == 0) {num1 = 1;}result = num1 / num2;break;
       printf("----\n");
       printf("your result is: %d\n", result);
       printf("----\n\n\n");
       printf("If you want to do another operation, click (y or n)? ");
       scanf("%s" , &yesOrNo);
    }while(yesOrNo == 'y');
```

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## Find output:

```
int main()
  int n = 4;
  int k = 2;
  printf ("%d \mid n", ++n);
  printf ("%d\n", n );
  printf ("%d\n", n++ );
  printf ("%d\n", n);
  printf ("%d\n", -n);
  printf ("%d\n", n);
  printf ("%d\n", --n );
  printf ("%d\n", n );
  printf ("%d\n", n-- );
  printf ("%d\n", n);
  printf ("%d\n", n+k);
  printf ("%d %d \n", n, k );
}
```

## **Output**

6 4 2

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