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| Ministry of Higher Education                                  |   |          |
| Higher Institute for Engineering and Technology at El-Manzala |   |          |
| First semester : 2022/2023                                    |  | Level: 3 |
| Department: Electronic Engineering.                           |   | Code:    |
| Sheet No. (2)   |   |          |
| Course title: Computer programing                             | Examiner: Dr. Noha Al-sayad<br>Eng. Rana.M.Elbalika                               |          |

### Answer all of the Following Questions

#### Question (1):

Write C program to find the maximum number out of the three, given numbers using if-else statement.

```
#include <stdio.h>

int main()
{
    int A, B, C;

    printf("Enter the numbers A, B and C: ");
    scanf("%d %d %d", &A, &B, &C);

    // finding max using compound expressions
    if (A >= B && A >= C)
        printf("%d is the largest number.", A);

    else if (B >= A && B >= C)
        printf("%d is the largest number.", B);

    else
        printf("%d is the largest number.", C);

    return 0;
}
```

#### Question (2):

Write C Program to make a Simple Calculator Using switch case.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    char ch;
    double a, b;
    while (1) {
        printf("Enter an operator (+, -, *, /), ");
        scanf(" %c", &ch);

        printf("Enter two first and second operand: ");
        scanf("%lf %lf", &a, &b);

        switch (ch) {
```

```

    case '+':
    printf("%.1lf + %.1lf = %.1lf\n", a, b, a + b);
        break;
    case '-':
    printf("%.1lf - %.1lf = %.1lf\n", a, b, a - b);
        break;
    case '*':
    printf("%.1lf * %.1lf = %.1lf\n", a, b, a * b);
        break;
    case '/':
    printf("%.1lf / %.1lf = %.1lf\n", a, b, a / b);
        break;
    default:
    printf("Error! please write a valid operator\n");
    }
    printf("\n");
}
}

```

### **Question (3):**

Write C program to Check Whether a Number is Positive or Negative or Zero.

```

#include <stdio.h>

int main()
{
    int A;

    printf("Enter the number A: ");
    scanf("%d", &A);

    if (A > 0)
        printf("%d is positive.", A);
    else if (A < 0)
        printf("%d is negative.", A);
    else if (A == 0)
        printf("%d is zero.", A);

    return 0;
}

```

### **Question (4):**

Write C Program to Swap Two Numbers

```

#include<stdio.h>
int main() {
int first, second, temp;
printf("Enter first number: ");
scanf("%d", &first);
printf("Enter second number: ");
scanf("%d", &second);

temp = first;
first = second;
second = temp;
printf("After swapping, first number = %.d\n", first);
printf("After swapping, second number = %.d", second);
return 0;  }

```