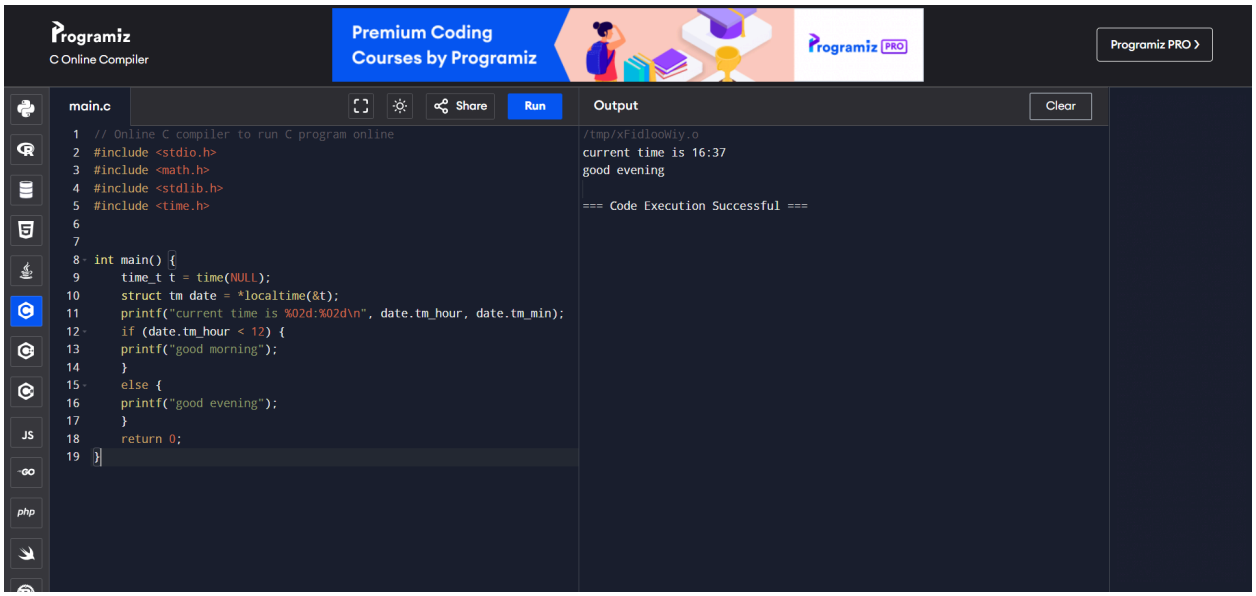
Question 1

```
#include <stdio.h>
#include <math.h>
#include <stdlib.h>
#include <time.h>


int main() {
    time_t t = time(NULL);
    struct tm date = *localtime(&t);
    printf("current time is %02d:%02d\n", date.tm_hour, date.tm_min);
    if (date.tm_hour < 12) {
    printf("good morning");
    }
    else {
    printf("good evening");
    }
    return 0;
}
```



Question 2

```
#include <stdio.h>
#include <math.h>
#include <stdlib.h>
#include <time.h>
```

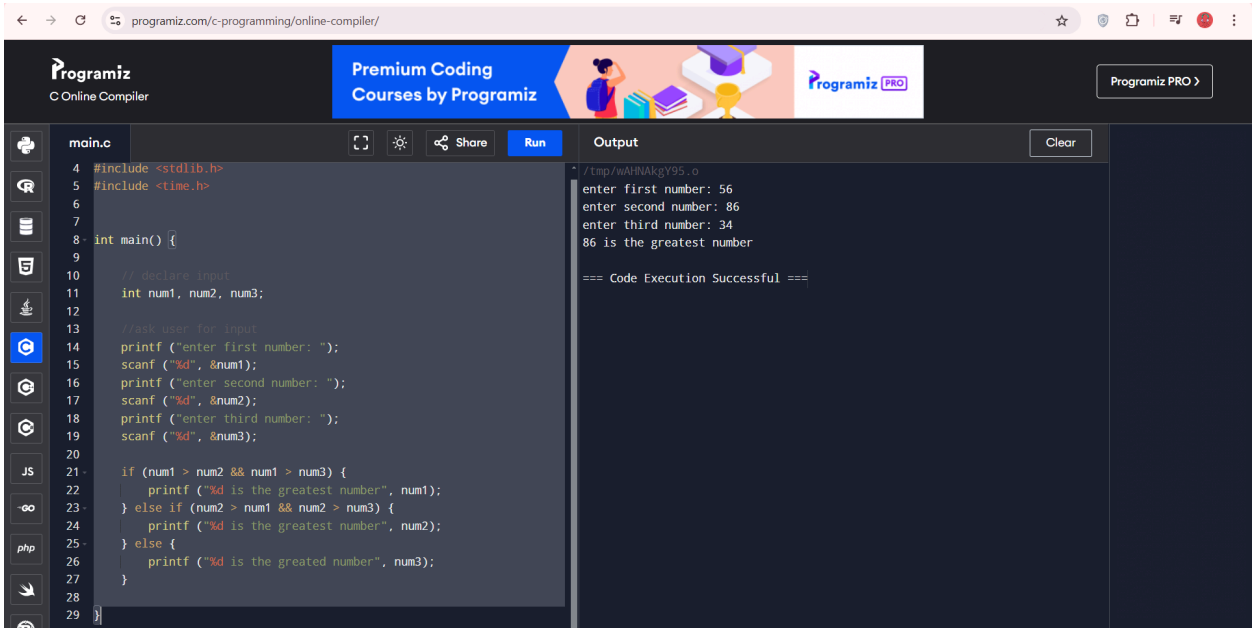
```
int main() {

    // declare input
    int num1, num2, num3;

    //ask user for input
    printf ("enter first number: ");
    scanf ("%d", &num1);
    printf ("enter second number: ");
    scanf ("%d", &num2);
    printf ("enter third number: ");
    scanf ("%d", &num3);

    if (num1 > num2 && num1 > num3) {
        printf ("%d is the greatest number", num1);
    } else if (num2 > num1 && num2 > num3) {
        printf ("%d is the greatest number", num2);
    } else {
        printf ("%d is the greated number", num3);
    }

}
```




```
#include <stdio.h>
```

```
int main() {
    // Declare and initialize character arrays
    char B[] = "burger";
    char F[] = "french fries";
    char P[] = "pizza";
    char S[] = "sandwiches";

    // Print menu
    printf("Menu:\n");
    printf("B = %s\n", B);
    printf("F = %s\n", F);
    printf("P = %s\n", P);
    printf("S = %s\n", S);

    int no_of_snacks;
    char type_of_snack[3];
    int quantity[3];
    int price;
    int total_price = 0; // Initialize total price to zero

    printf("How many types of snacks do you need to order?: ");
    scanf("%d", &no_of_snacks);

    if (no_of_snacks == 1) {
        printf("Enter snack you want to order (B/F/P/S): ");
        scanf(" %c", &type_of_snack[0]);
        printf("Please provide quantity: ");
        scanf("%d", &quantity[0]);

        printf("\nYou have ordered:\n");
        switch(type_of_snack[0]) {
            case 'B':
                printf("%s - %d\n", B, quantity[0]);
                price = 200 * quantity[0];
                printf("Total price for burgers is %d\n", price);
                total_price += price;
                break;
            case 'F':
                printf("%s - %d\n", F, quantity[0]);
                price = 50 * quantity[0];
                printf("Total price for fries is %d\n", price);
                total_price += price;
                break;
            case 'P':
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            printf("%s - %d\n", P, quantity[0]);
            price = 500 * quantity[0];
            printf("Total price for pizza is %d\n", price);
            total_price += price;
            break;
        case 'S':
            printf("%s - %d\n", S, quantity[0]);
            price = 150 * quantity[0];
            printf("Total price for sandwiches is %d\n", price);
            total_price += price;
            break;
        default:
            printf("Invalid choice.\n");
            break;
    }
} else if (no_of_snacks == 2) {
    printf("Enter the first snack you want to order (B/F/P/S): ");
    scanf(" %c", &type_of_snack[0]);
    printf("Please provide quantity: ");
    scanf("%d", &quantity[0]);

    printf("Enter the second snack you want to order (B/F/P/S): ");
    scanf(" %c", &type_of_snack[1]);
    printf("Please provide quantity: ");
    scanf("%d", &quantity[1]);

    printf("\nYou have ordered:\n");
    // Process first snack
    switch(type_of_snack[0]) {
        case 'B':
            printf("%s - %d\n", B, quantity[0]);
            price = 200 * quantity[0];
            printf("Total price for burgers is %d\n", price);
            total_price += price;
            break;
        case 'F':
            printf("%s - %d\n", F, quantity[0]);
            price = 50 * quantity[0];
            printf("Total price for fries is %d\n", price);
            total_price += price;
            break;
        case 'P':
            printf("%s - %d\n", P, quantity[0]);
            price = 500 * quantity[0];
```
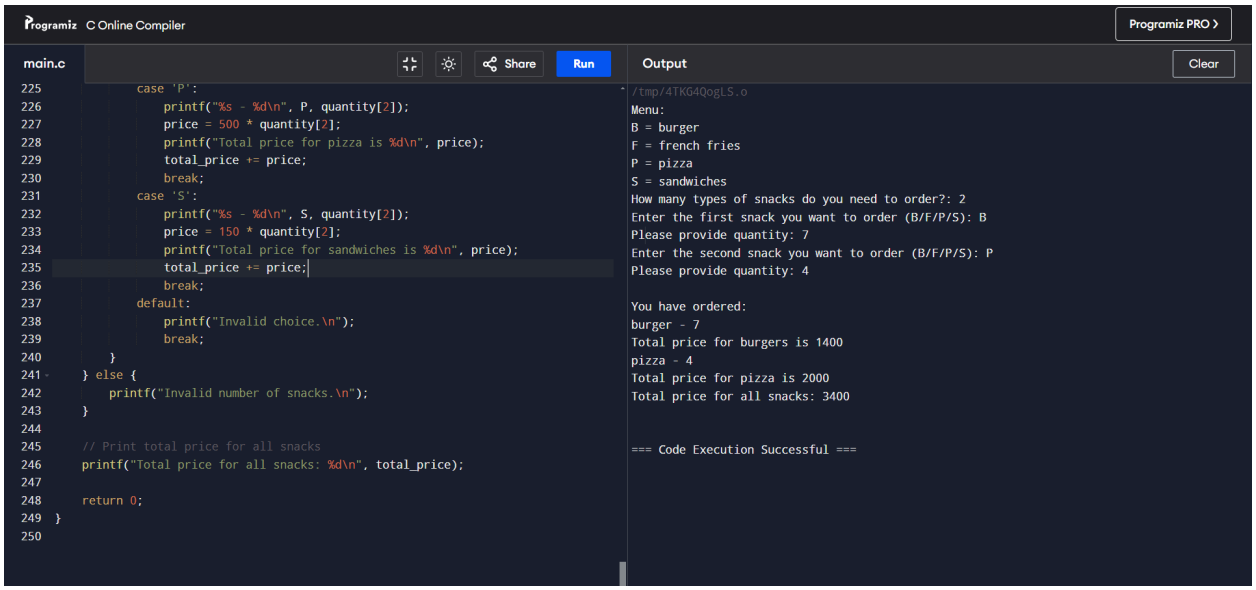

```
            printf("Total price for pizza is %d\n", price);
            total_price += price;
            break;
        case 'S':
            printf("%s - %d\n", S, quantity[0]);
            price = 150 * quantity[0];
            printf("Total price for sandwiches is %d\n", price);
            total_price += price;
            break;
        default:
            printf("Invalid choice.\n");
            break;
    }
    // Process second snack
    switch(type_of_snack[1]) {
        case 'B':
            printf("%s - %d\n", B, quantity[1]);
            price = 200 * quantity[1];
            printf("Total price for burgers is %d\n", price);
            total_price += price;
            break;
        case 'F':
            printf("%s - %d\n", F, quantity[1]);
            price = 50 * quantity[1];
            printf("Total price for fries is %d\n", price);
            total_price += price;
            break;
        case 'P':
            printf("%s - %d\n", P, quantity[1]);
            price = 500 * quantity[1];
            printf("Total price for pizza is %d\n", price);
            total_price += price;
            break;
        case 'S':
            printf("%s - %d\n", S, quantity[1]);
            price = 150 * quantity[1];
            printf("Total price for sandwiches is %d\n", price);
            total_price += price;
            break;
        default:
            printf("Invalid choice.\n");
            break;
    }
} else if (no_of_snacks == 3) {
```

```
printf("Enter the first snack you want to order (B/F/P/S): ");
scanf(" %c", &type_of_snack[0]);
printf("Please provide quantity: ");
scanf("%d", &quantity[0]);

printf("Enter the second snack you want to order (B/F/P/S): ");
scanf(" %c", &type_of_snack[1]);
printf("Please provide quantity: ");
scanf("%d", &quantity[1]);

printf("Enter the third snack you want to order (B/F/P/S): ");
scanf(" %c", &type_of_snack[2]);
printf("Please provide quantity: ");
scanf("%d", &quantity[2]);

printf("\nYou have ordered:\n");
// Process first snack
switch(type_of_snack[0]) {
    case 'B':
        printf("%s - %d\n", B, quantity[0]);
        price = 200 * quantity[0];
        printf("Total price for burgers is %d\n", price);
        total_price += price;
        break;
    case 'F':
        printf("%s - %d\n", F, quantity[0]);
        price = 50 * quantity[0];
        printf("Total price for fries is %d\n", price);
        total_price += price;
        break;
    case 'P':
        printf("%s - %d\n", P, quantity[0]);
        price = 500 * quantity[0];
        printf("Total price for pizza is %d\n", price);
        total_price += price;
        break;
    case 'S':
        printf("%s - %d\n", S, quantity[0]);
        price = 150 * quantity[0];
        printf("Total price for sandwiches is %d\n", price);
        total_price += price;
        break;
    default:
        printf("Invalid choice.\n");
```

```
        break;
}
// Process second snack
switch(type_of_snack[1]) {
    case 'B':
        printf("%s - %d\n", B, quantity[1]);
        price = 200 * quantity[1];
        printf("Total price for burgers is %d\n", price);
        total_price += price;
        break;
    case 'F':
        printf("%s - %d\n", F, quantity[1]);
        price = 50 * quantity[1];
        printf("Total price for fries is %d\n", price);
        total_price += price;
        break;
    case 'P':
        printf("%s - %d\n", P, quantity[1]);
        price = 500 * quantity[1];
        printf("Total price for pizza is %d\n", price);
        total_price += price;
        break;
    case 'S':
        printf("%s - %d\n", S, quantity[1]);
        price = 150 * quantity[1];
        printf("Total price for sandwiches is %d\n", price);
        total_price += price;
        break;
    default:
        printf("Invalid choice.\n");
        break;
}
// Process third snack
switch(type_of_snack[2]) {
    case 'B':
        printf("%s - %d\n", B, quantity[2]);
        price = 200 * quantity[2];
        printf("Total price for burgers is %d\n", price);
        total_price += price;
        break;
    case 'F':
        printf("%s - %d\n", F, quantity[2]);
        price = 50 * quantity[2];
        printf("Total price for fries is %d\n", price);
```

```
            total_price += price;
            break;
        case 'P':
            printf("%s - %d\n", P, quantity[2]);
            price = 500 * quantity[2];
            printf("Total price for pizza is %d\n", price);
            total_price += price;
            break;
        case 'S':
            printf("%s - %d\n", S, quantity[2]);
            price = 150 * quantity[2];
            printf("Total price for sandwiches is %d\n", price);
            total_price += price;
            break;
        default:
            printf("Invalid choice.\n");
            break;
    }
  } else {
    printf("Invalid number of snacks.\n");
  }

  // Print total price for all snacks
  printf("Total price for all snacks: %d\n", total_price);

  return 0;
}
```



Question 4