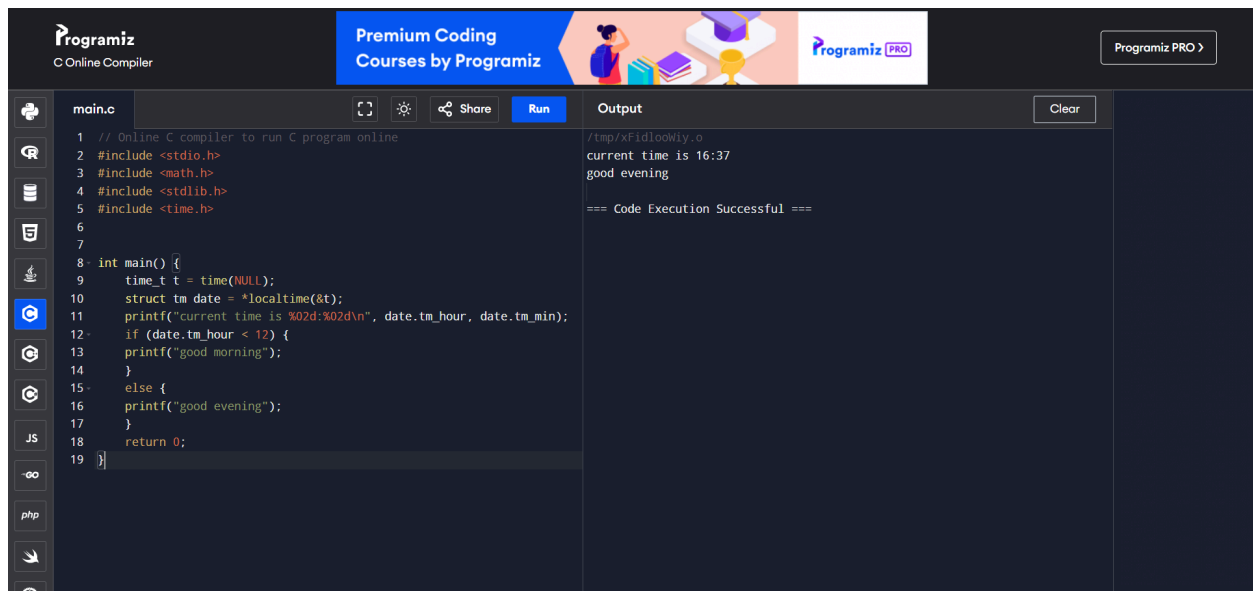


Question 1

```
#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;
}
```



The screenshot displays the Programiz C Online Compiler interface. The top header includes the Programiz logo, a banner for 'Premium Coding Courses by Programiz', and a 'Programiz PRO' button. The main workspace is divided into a code editor on the left and an output panel on the right. The code editor shows the C program for Question 1, with line numbers 1 through 19. The output panel shows the execution results: 'current time is 16:37' and 'good evening', followed by '=== Code Execution Successful ==='. A sidebar on the left contains icons for various programming languages and tools.

```
main.c
1 // Online C compiler to run C program online
2 #include <stdio.h>
3 #include <math.h>
4 #include <stdlib.h>
5 #include <time.h>
6
7
8 int main() {
9     time_t t = time(NULL);
10    struct tm date = *localtime(&t);
11    printf("current time is %02d:%02d\n", date.tm_hour, date.tm_min);
12    if (date.tm_hour < 12) {
13        printf("good morning");
14    }
15    else {
16        printf("good evening");
17    }
18    return 0;
19 }
```

Output

```
/tmp/xFidlo0Wiy.o
current time is 16:37
good evening

=== Code Execution Successful ===
```

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);
    }

}

```

The screenshot shows the Programiz Online Compiler interface. The left sidebar contains icons for various programming languages: C, C++, Java, JavaScript, PHP, Python, Ruby, and Swift. The main editor area displays the C code from the previous block, with line numbers 4 through 29. The code includes headers for `stdlib.h` and `time.h`, declares three integers, prompts the user for three numbers, and uses conditional logic to determine the greatest number. The 'Run' button is highlighted. The right sidebar shows the 'Output' window, which displays the program's execution results: 'enter first number: 56', 'enter second number: 86', 'enter third number: 34', and '86 is the greatest number'. Below the output, it states '=== Code Execution Successful ==='. The browser's address bar shows the URL 'programiz.com/c-programming/online-compiler/'.

#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':

```

```

    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;
}

```

Programiz C Online Compiler

Programiz PRO >

main.c

Share

Run

Output

Clear

```

225     case 'P':
226         printf("%s - %d\n", P, quantity[2]);
227         price = 500 * quantity[2];
228         printf("Total price for pizza is %d\n", price);
229         total_price += price;
230         break;
231     case 'S':
232         printf("%s - %d\n", S, quantity[2]);
233         price = 150 * quantity[2];
234         printf("Total price for sandwiches is %d\n", price);
235         total_price += price;
236         break;
237     default:
238         printf("Invalid choice.\n");
239         break;
240     }
241 } else {
242     printf("Invalid number of snacks.\n");
243 }
244
245 // Print total price for all snacks
246 printf("Total price for all snacks: %d\n", total_price);
247
248 return 0;
249 }
250

```

/tmp/4TKG4QogLS.o

Menu:
B = burger
F = french fries
P = pizza
S = sandwiches
How many types of snacks do you need to order?: 2
Enter the first snack you want to order (B/F/P/S): B
Please provide quantity: 7
Enter the second snack you want to order (B/F/P/S): P
Please provide quantity: 4

You have ordered:
burger - 7
Total price for burgers is 1400
pizza - 4
Total price for pizza is 2000
Total price for all snacks: 3400

=== Code Execution Successful ===

Question 4