

Lab Report 03 by 0432410005101088 (Saraf)

Problems of Lab Report 3:

1. Write a C program to check whether an alphabet is vowel or consonant using switch case.
2. Write a C program to check whether an alphabet is a vowel or consonant using the ternary operator
3. Write a C program to print the day of the week name using a switch case.
4. Write a C program to print the total number of days in a month using a switch case.
5. Write a C program to find the maximum and minimum number between two numbers using a switch case.
6. Write a C program to find the maximum and minimum numbers among three numbers using the ternary operator.
7. Write a C program to check whether a number is even or odd using a switch case and ternary operator.
8. Write a C program to check whether a number is negative, positive or zero using switch case and ternary operator

01_check_whether_an_alphabet_is_vowel_or_consonant_using_switch_case.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

<global> main(): int

Start here x 01_check_whether_an_alphabet_is_vowel_or_consonant_using_switch_case.c x

```
1 // Write a C program to check whether an alphabet is vowel or consonant
  using switch case
2 #include <stdio.h>
3
4 int main()
5 {
6     char ch;
7     printf("Enter a character: ");
8     scanf("%c", &ch);
9     if ((ch >= 'A' && ch <= 'Z' || ch >= 'a' && ch <= 'z'))
10         switch (ch)
11         {
12             case 'A':
13             case 'E':
14             case 'I':
15             case 'O':
16             case 'U':
17             case 'a':
18             case 'e':
19             case 'i':
20             case 'o':
21             case 'u':
22                 printf("character is a Vowel"); // can write only once for
same printf()
                break;
24             default:
25                 printf("consonant");
26         }
27     return 0;
28 }
29
```

Logs & others

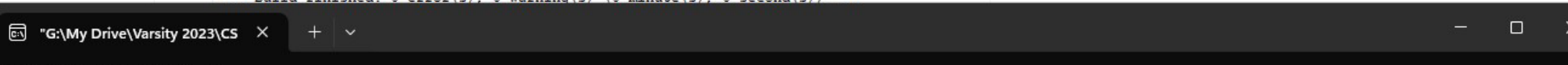
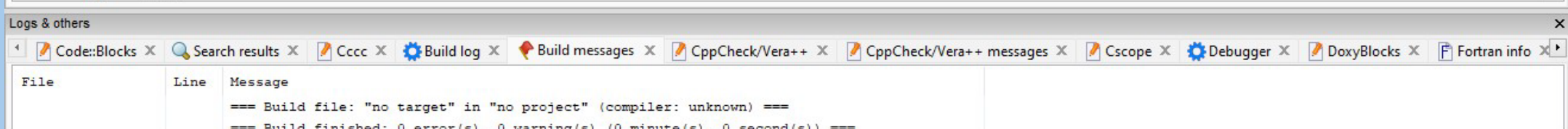
Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cscope x

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

G:\My Drive\Varsity 20... C/C++ Windows (CR+LF) WINDOWS-1252 Line 8, Col 22, Pos 199 Insert Read/Write default

"G:\My Drive\Varsity 2023\CS x + -

Enter a character: A
character is a Vowel
Process returned 0 (0x0) execution time : 20.214 s
Press any key to continue.



```
Build finished. 0.1101(s), 0 Warning(s), 0 Minute(s), 0 Second(s)
G:\My Drive\Varsity 2023\CS x + v
Enter a character: A

Is's a Vowel

Process returned 0 (0x0) execution time : 130.855 s
Press any key to continue.
```

03_print_the_day_of_the_week_name_using_a_switch_case.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

<global> main(): int

02_check_whether_an_alphabet_is_a_vowel_or_consonant_using_the_ternary_operator.c x 03_print_the_day_of_the_week_name_using_a_switch_case.c x

```
1 // Write a C program to print the day of the week name using a switch
2 case
3 #include <stdio.h>
4 int main()
5 {
6     int day;
7     printf("Enter day number(1-7): ");
8     scanf("%d", &day);
9     switch (day)
10    {
11        case 1:
12            printf("Sunday"); //international weekend
13            break;
14        case 2:
15            printf("Monday");
16            break;
17        case 3:
18            printf("Tuesday");
19            break;
20        case 4:
21            printf("Wednesday");
22            break;
23        case 5:
24            printf("Thursday");
25            break;
26        case 6:
27            printf("Friday");
28            break;
29        case 7:
30            printf("Saturday");
31            break;
32        default:
33            printf("NULL");
34    }
35    return 0;
36 }
```

Logs & others

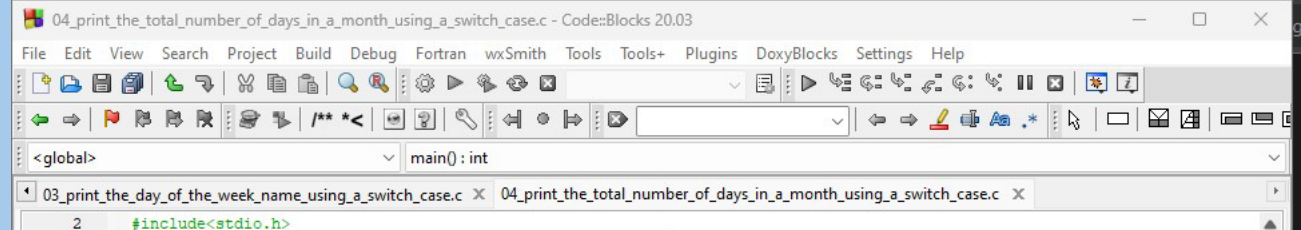
Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cs x

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===

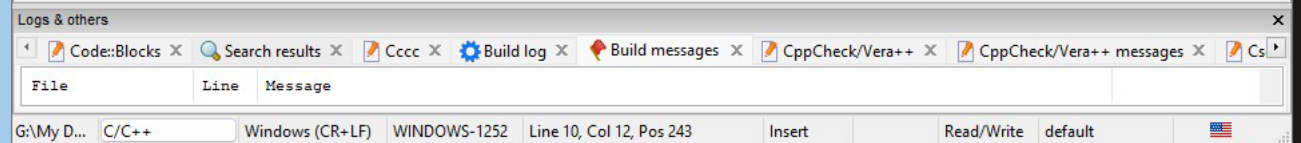
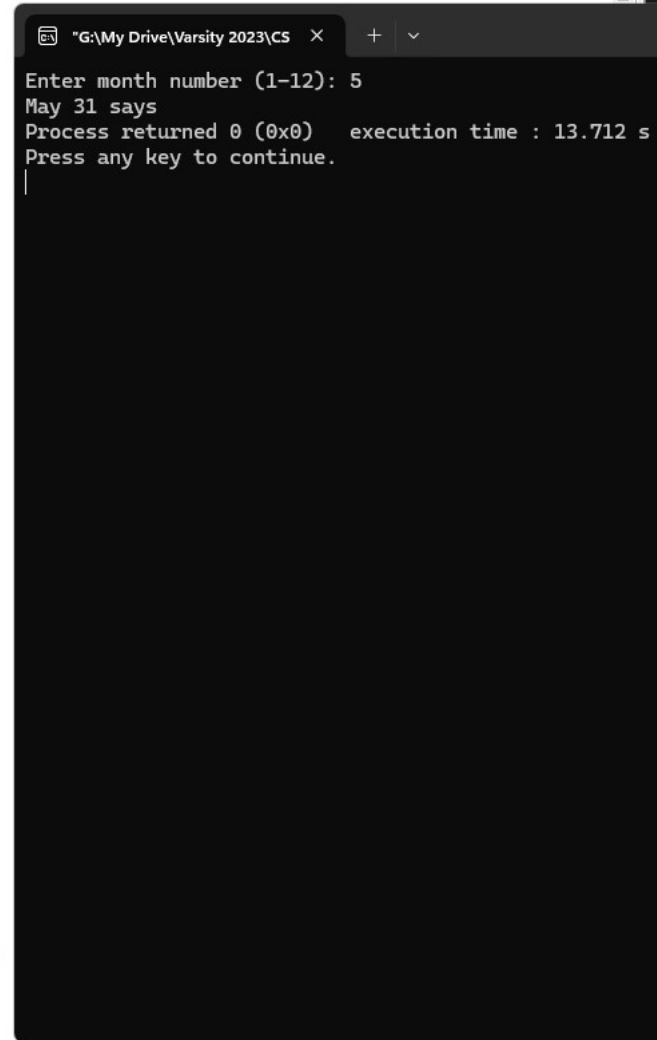
G:\My D... C/C++ Windows (CR+LF) WINDOWS-1252 Line 19, Col 12, Pos 418 Insert Read/Write default

"G:\My Drive\Varsity 2023\CS x + v

```
Enter day number(1-7): 3
Tuesday
Process returned 0 (0x0)    execution time : 7.930 s
Press any key to continue.
```



```
2  #include<stdio.h>
3  int main()
4  {
5      int month;
6      printf("Enter month number (1-12): ");
7      scanf("%d", &month);
8      switch(month)
9      {
10         case 1:
11             printf("January 31 days");
12             break;
13         case 2:
14             printf("February 28/29 days");
15             break;
16         case 3:
17             printf("March 31 days");
18             break;
19         case 4:
20             printf("April 30 days");
21             break;
22         case 5:
23             printf("May 31 says");
24             break;
25         case 6:
26             printf("June 30 days");
27             break;
28         case 7:
29             printf("July 31 says");
30             break;
31         case 8:
32             printf("August 31 days");
33             break;
34         case 9:
35             printf("September 30 says");
36             break;
37         case 10:
38             printf("October 31 days");
39             break;
40         case 11:
41             printf("November 30 says");
42             break;
43         case 12:
44             printf("December 31 days");
45             break;
46         default:
47             printf("INVALID!! Enter month number (1-12)");
48             break;
49     }
50     return 0;
51 }
```



```
05_find_the_maximum_and_minimum_number_between_two_numbers_using_a_switch_case.c - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
04_print_the_total_number_of_days_in_a_month_using_a_switch_case.c 05_find_the_maximum_and_minimum_number_between_two_numbers_using_a_switch_case.c
1 // Write a C program to find the maximum and
2 minimum number between two numbers using a
3 switch case
4
5 #include <stdio.h>
6
7 int main()
8 {
9     int num1, num2;
10    printf("Enter two numbers to compare: ");
11    scanf("%d %d", &num1, &num2);
12    switch (num1 > num2)
13    {
14        case 1:
15            printf("Maximum number is %d and
16            Minimum number is %d", num1, num2);
17            break;
18        default:
19            printf("Maximum number is %d and
20            Minimum number is %d", num2, num1);
21    }
22    return 0;
23 }
```

```
Logs & others
Code::Blocks Search results Cccc Build log Build messages CppCheck/Vera++ CppCheck/Vera++ messages Cs
File Line Message
=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===
```

```
"G:\My Drive\Varsity 2023\CS" +
Enter two numbers to compare: 3 7
Maximum number is 7 and Minimum number is 3
Process returned 0 (0x0) execution time : 16.293 s
Press any key to continue.
```

```
06_read_and_find_the_max_min_among_three_numbers_using_the_ternary_operator.c - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
06_read_and_find_the_max_min_among_three_numbers_using_the_ternary_operator.c x
1 //Write a C program to find the maximum and minimum
2 numbers among three numbers using the ternary operator
3 #include <stdio.h>
4 int main()
5 {
6     int a, b, c, x, y, z;
7     scanf("%d %d %d", &a, &b, &c);
8     (a > b) ? (x = a, y = b) : (x = b, y = a);
9     (x > c && y > c) ? (z = c) : ((c > x && c > y) ?
10 (z = y, x = c) : (z = y));
11 printf("max = %d\nmin = %d", x, z);
12
13 // printf("%d %d", x,y);
14
15 /*
16 //this is the correct code provided by Sadia Ma'am
17
18 (a>b && a>c)? printf("%d is maximum\n",a):(b>a
19 && b>c)?printf("%d is maximum\n",b):printf("%d is
20 maximum", c));
21 (a<b && a<c)? printf("%d is minimum\n",a):(b>a
22 && b>c)?printf("%d is minimum\n",b):printf("%d is
23 minimum", c));
24
25 */
26 return 0;
27 }
```

```
Logs & others
Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cs
File Line Message
=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===
G:\My D... C/C++ Windows (CR+LF) WINDOWS-1252 Line 6, Col 35, Pos 204 Insert Read/Write default
```

```
"G:\My Drive\Varsity 2023\CS x + v
999
1
8
max = 999
min = 1
Process returned 0 (0x0) execution time : 9.110 s
Press any key to continue.
```



```
07_check_whether_a_number_is_even_or_odd_using_a_switch_case_and_ternary_operator.c - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
<global> main(): int
06_read_and_find_the_max_min_among_three_numbers_using_the_ternary_operator.c 07_check_whether_a_number_is_even_or_odd_using_a_switch_case_and_ternary_operator.c
1 // Write a C program to check whether a number is even or odd using a
2 switch case and ternary operator
3 #include <stdio.h>
4 int main()
5 {
6     int num;
7     printf("Input a number for checking Even or Odd: ");
8     scanf("%d", &num);
9     printf("\n\n( using Switch Case )\n\n");
10    switch (num % 2 == 0)
11    {
12        case 1:
13            printf("Even");
14            break;
15        default:
16            printf("Odd");
17    }
18    printf("\n\n( using Ternary Operator )\n\n");
19    (num % 2 == 0) ? printf("\nThe number is Even\n") : printf("\nThe
20    number is Odd\n");
21    printf("\n\n");
22    return 0;
}
```

```
Logs & others
Code::Blocks Search results Cccc Build log Build messages CppCheck/Vera++ CppCheck/Vera++ messages Cscope Debugger DoxyBlocks Fortran
File Line Message
=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===
G:\My Drive\Varsity 2023\CSE central\UITS\Code\SPL Lab (B55 088)... :C/C++ Windows (CR+LF) WINDOWS-1252 Line 14, Col 13, Pos 381 Insert Read/Write default
```

```
"G:\My Drive\Varsity 2023\CS + -
Input a number for checking Even or Odd: -99

( using Switch Case )

Odd

( using Ternary Operator )

The number is Odd

Process returned 0 (0x0) execution time : 4.455 s
Press any key to continue.
```



```
08_check_whether_a_number_is_negative_positive_or_zero_using_switch_case_and_ternary_operator.c - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
<global> main(): int
07_check_whether_a_number_is_even_or_odd_using_a_switch_case_and_ternary_operator.c x 08_check_whether_a_number_is_negative_positive_or_zero_using_switch_case_and_ternary_operator.c x
1 // Write a C program to check whether a number is negative, positive or zero using
2 switch case and ternary operator
3 #include <stdio.h>
4 int main()
5 {
6     int num;
7     printf("Enter number to find +ve/-ve/0: \n\n");
8     scanf("%d", &num);
9     printf("\n\n( using Switch Case )\n\n");
10    switch (num == 0)
11    {
12        case 1:
13            printf("Zero");
14            break;
15        case 0:
16            switch (num > 0)
17            {
18                case 1:
19                    printf("Positive");
20                    break;
21                default:
22                    printf("Negative");
23            }
24    }
25    printf("\n\n( using Ternary Operator )\n\n");
26    (num == 0) ? printf("Zero") : ((num > 0) ? printf("Positive") : printf("Negative"));
27    printf("\n\n");
28
29    return 0;
30 }
31
```

```
Logs & others
Code::Blocks x Search results x Cccc x Build log x Build messages x CppCheck/Vera++ x CppCheck/Vera++ messages x Cscope x Debugger x DoxyBlocks x Fortran
File Line Message
=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===
G:\My Drive\Varsity 2023\CSE central\UITS\Code\SPL Lab (B55 088) C/C++ Windows (CR+LF) WINDOWS-1252 Line 5, Col 13, Pos 164 Insert Read/Write default
```

```
"G:\My Drive\Varsity 2023\CS x + v
Enter number to find +ve/-ve/0:
-9

( using Switch Case )
Negative

( using Ternary Operator )
Negative

Process returned 0 (0x0) execution time : 3.720 s
Press any key to continue.
```