Assignment – 09

A Job Ready Bootcamp in C++, DSA and IOT

Switch Case Problems

Name: Tushar Maliye Date:21/12/2022

User id: [tusharmaliye59@gmail.com](mailto:tusharmaliye59@gmail.com)

1. Write a program which takes the month number as an input and display number of days in that month.

PROGRAM:

#include<stdio.h>

int main()

{

int n;

printf("Enter number of month.");

scanf("%d",&n);

switch(n)

{

case 1: printf(" Month =January , Days = 31");

break;

case 2: printf(" Month =February , Days = 28/28");

break;

case 3: printf(" Month =March , Days = 31");

break;

case 4: printf(" Month =April , Days = 30");

break;

case 5: printf(" Month =May, Days = 31");

break;

case 6: printf(" Month =June , Days = 30");

break;

case 7: printf(" Month =July, Days = 31");

break;

case 8: printf(" Month =August, Days = 31");

break;

case 9: printf(" Month =September , Days = 30");

break;

case 10: printf(" Month =October , Days = 31");

break;

case 11: printf(" Month =November , Days = 30");

break;

case 12: printf(" Month =December , Days = 31");

break;

default : printf(" Invalid Number");

break;

}

return 0;

}

OUTPUT:

Enter number of month.8

Month =August, Days = 31

--------------------------------

Process exited after 4.668 seconds with return value 0

Press any key to continue . . .

2. Write a menu driven program with the following options:

a. Addition

b. Subtraction

c. Multiplication

d. Division

e. Exit

PROGRAM;

#include<stdio.h>

#include<cstdlib>

int main()

{

int choice,a,b;

printf("1. Addition\n ");

printf("2. Subtraction\n");

printf("3. Multiplication\n");

printf("4. Division\n");

printf("5. Exit\n");

printf(" NOTE: Entered first number should be greater than second one.");

while(1)

{

printf("\nEnter your choice : ");

scanf("%d",&choice);

switch(choice)

{

case 1: printf("-----ADDITION-------");

printf("\nEnter Two numbers: ");

scanf("%d %d",&a,&b);

printf("\nAddition= %d",a+b);

printf("\n-------------------");

break;

case 2: printf("\n-----SUBTRACTION----");

printf("\nEnter two numbers : ");

scanf("%d %d",&a,&b);

printf("\nSubtraction= %d",a-b);

printf("\n------------------");

break;

case 3: printf("-----MULTIPLICATION----");

printf("\nEnter two numbers : ");

scanf("%d %d",&a,&b);

printf("\nMultiplication= %d",a\*b);

printf("\n-------------------");

break;

case 4: printf("-----DIVISION----");

printf("\n Enter two numbers : ");

scanf("%d %d",&a,&b);

if(b!=0)

{

printf("\nDivision = %d",a/b);

printf("\n-------------------");

}

else

{

printf("\nInvalid nubmer..... Try again");

printf("\n------------------");

}

break;

case 5: exit(0);

}

}

return 0;

}

----------------------------------------------

OUTPUT:

1. Addition

2. Subtraction

3. Multiplication

4. Division

5. Exit

NOTE: Entered first number should be greater than second one.

Enter your choice : 1

-----ADDITION-------

Enter Two numbers: 5 4

Addition= 9

-------------------

Enter your choice : 2

-----SUBTRACTION----

Enter two numbers : 9 4

Subtraction= 5

------------------

Enter your choice : 3

-----MULTIPLICATION----

Enter two numbers : 5 6

Multiplication= 30

-------------------

Enter your choice : 4

-----DIVISION----

two numbers : 10 5

Division = 2

-------------------

Enter your choice : 5

--------------------------------

Process exited after 51.07 seconds with return value 0

Press any key to continue . . .

1. Write a program which takes the day number of a week and displays a unique greeting message for the day.

Program:

#include<stdio.h>

#include<cstdlib>

int main()

{

int n;

while(1)

{

printf("\nEnter day number: ");

scanf("%d",&n);

switch(n)

{

case 1: printf("\_\_\_\_\_MONDAY\_\_\_\_\_");

printf(" \nAn early-morning walk is a blessing for the whole day !\n");

printf("\n-------------------");

break;

case 2: printf("\n\_\_\_\_TUESDAY\_\_\_\_\_");

printf("\n Every morning, I wake up saying, I am still alive, a miracle.\n And so I keep on pushing. — Jim Carrey");

printf("\n------------------");

break;

case 3: printf("\_\_\_\_WEDNESDAY\_\_\_\_");

printf("\n Every day is a good day to be alive,\n whether the sun\'s shining or not. Marty Robbins");

printf("\n-------------------");

break;

case 4: printf("\_\_\_\_THUSEDAY\_\_\_\_");

printf("\n On a good day everybody can beat everybody. - Chris Hughton");

printf("\n-------------------");

break;

case 5: printf("\_\_\_\_FRIDAY\_\_\_\_");

printf("\n Inspiration does exist, but it must find you working.");

printf("\n-------------------");

break;

case 6: printf("\_\_\_\_SATURDAY\_\_\_\_");

printf("\n Show up, show up, show up, \nand after a while the muse shows up, too.");

printf("\n-------------------");

break;

case 7: printf("\_\_\_\_SUNDAY\_\_\_\_");

printf("\n Our greatest weakness lies in giving up. \nThe most certain way to succeed is always to try just one more time..");

printf("\n-------------------");

break;

case 8: exit(0);

}

}

return 0;

}

OUTPUT:

Enter day number: 1

\_\_\_\_\_MONDAY\_\_\_\_\_

An early-morning walk is a blessing for the whole day !

-------------------

Enter day number: 2

\_\_\_\_TUESDAY\_\_\_\_\_

Every morning, I wake up saying, I am still alive, a miracle.

And so I keep on pushing. ù Jim Carrey

------------------

Enter day number: 3

\_\_\_\_WEDNESDAY\_\_\_\_

Every day is a good day to be alive,

whether the sun's shining or not. Marty Robbins

-------------------

Enter day number: 8

--------------------------------

Process exited after 6.889 seconds with return value 0

Press any key to continue . . .

4. Write a menu driven program with the following options:

a. Check whether a given set of three numbers are lengths of an

isosceles triangle or not

b. Check whether a given set of three numbers are lengths of sides of

a right angled triangle or not

c. Check whether a given set of three numbers are equilateral triangle

or not

d. Exit

PROGRAMS:

#include<stdio.h>

#include<cstdlib>

int main()

{

int choice,a,b,c;

int flag;

printf("\n1.Check whether a given set of three numbers are lengths of an isosceles triangle or not.");

printf(" \n2.Check whether a given set of three numbers are lengths of sides of a right angled triangle or not.");

printf("\n3.Check whether a given set of three numbers are equilateral triangle or not");

printf("\n 4.Exit");

while(1)

{

printf("\n Enter your choice");

scanf("%d",&choice);

switch(choice)

{

case 1: printf("Check for Isoscales Triangle. ");

printf("\nEnter Sides of traingle: ");

scanf(" %d %d %d", &a, &b,&c);

(a==b || a==c || b==c)? flag =1:flag=0;

if(flag==1)

printf("\nIt is Isoscales Triangle");

else

printf("\nIt is not a isocales traingle");

printf("\n------------------------");

break;

case 2: printf("\ncheck for right angle triangle.");

printf("Enter Sides of traingle: ");

scanf(" %d %d %d", &a, &b, &c);

if(a>b && a>c)

(a\*a == (b\*b+c\*c))? flag=1: flag=0;

else if( b>a && b>c)

(b\*b == (a\*a+c\*c))? flag=1: flag=0;

else if(c>a && c>b)

(c\*c == (b\*b+a\*a))? flag=1: flag=0;

else if(a==b==c)

flag=0;

if(flag==1)

printf("\nIt is Right Angle Triangle");

else

printf("\nIt is not a Right Angle traingle");

printf("\n------------------");

break;

case 3: printf("Check for Equilateral Triangle. ");

printf("\nEnter Sides of traingle: ");

scanf(" %d %d %d", &a, &b,&c);

(a==b && a==c)? flag =1:flag=0;

if(flag==1)

printf("\nIt is Equlateral Triangle");

else

printf("\nIt is not a Equilateral traingle");

printf("\n------------------------");

break;

case 4: exit(0);

}

}

return 0;

}

OUTPUT;

1.Check whether a given set of three numbers are lengths of an isosceles triangle or not.

2.Check whether a given set of three numbers are lengths of sides of a right angled triangle or not.

3.Check whether a given set of three numbers are equilateral triangle or not

4.Exit

Enter your choice1

Check for Isoscales Triangle.

Enter Sides of traingle: 4 5 6

It is not a isocales traingle

------------------------

Enter your choice 2

check for right angle triangle.Enter Sides of traingle: 5 4 3

It is Right Angle Triangle

------------------

Enter your choice 3

Check for Equilateral Triangle.

Enter Sides of traingle: 9 9 9

It is Equlateral Triangle

------------------------

Enter your choice 4

--------------------------------

Process exited after 52.78 seconds with return value 0

Press any key to continue . . .

5. Convert the following if-else-if construct into switch case:

if(var == 1)

System.out.println("good");

else if(var == 2)

System.out.println("better");

else if(var == 3)

System.out.println("best");

else

System.out.println("invalid");

PORGRAM:

#include<stdio.h>

#include<cstdlib>

int main()

{

int var;

printf("\n1.GOOD \n 2.BEST \n 3.BETTER");

while(1)

{

printf("\n Enter the variavle: ");

scanf("%d",&var);

if(var!=1 && var!=2 && var!=3 && var!=4)

printf("Invalid");

switch(var)

{

case 1: printf("\nGOOD");

printf("\n-------------");

break;

case 2: printf("\nBEST");

printf("\n--------------");

break;

case 3: printf("\nBETTER");

printf("\n--------------");

break;

case 4: exit(0);

}

}

return 0;

}

Ouput:

1.GOOD

2.BEST

3.BETTER

Enter the variavle: 1

GOOD

-------------

Enter the variavle: 3

BETTER

--------------

Enter the variavle: 4

--------------------------------

Process exited after 7.839 seconds with return value 0

Press any key to continue . . .