ASSIGMENT-9

1. #include <stdio.h>

int main()

{

int month;

int days;

printf("Enter month: ");

scanf("%d",&month);

switch(month)

{

case 4:

case 6:

case 9:

case 11:

days=30;

break;

case 1:

case 3:

case 5:

case 7:

case 8:

case 10:

case 12:

days=31;

break;

case 2:

days=28;

break;

default:

days=0;

break;

}

if(days)

printf("Number of days in %d month is: %d\n",month,days);

else

printf("You have entered an invalid month!!!\n");

return 0;

}

2 #include <stdio.h>

int main()

{

int a,b,choise;

printf("Enter your choice:\n1.Addition\n2.Subtraction,\n3.multiplication,\n4.division");

scanf("%d",&choise);

switch(choise)

{

case 1:

printf("enter two numbers: ");

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

printf("the sum is:%d",a+b);

break;

case 2:

printf("enter two numbers: ");

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

printf("the subtraction is:%d",a-b);

break;

case 3:

printf("enter two numbers: ");

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

printf("the multiplication is:%d",a\*b);

break;

case 4:

printf("enter two numbers: ");

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

printf("the division is:%d",a/b);

break;

case 5:

exit(0);

default:

printf(" invalid choise ");

}

return 0;

}

3 #include <stdio.h>

int main()

{

int choise;

printf("Enter your number of week");

scanf("%d",&choise);

switch(choise)

{

case 1:

printf("sunday ");

break;

case 2:

printf("monday ");

break;

case 3:

printf("tuesday ");

break;

case 4:

printf("wednesday ");

break;

case 5:

printf("thrusday ");

break;

case 6:

printf("friday");

break;

case 7:

printf("saturday");

break;

default:

printf(" invalid choise ");

}

return 0;

}

4 #include<stdio.h>

int main()

{

int a,b,c,choice;

printf("enter your choice: 1.isoceles 2.right angled 3.equilateral triangle 4.exit");

scanf("%d",&choice);

printf("enter the three sides of a triangle: ");

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

switch(choice)

{

case 1:

if(a==b||b==c||c==a)

printf("the triangle is isoceles");

else

printf("not an isoceles");

break;

case 2:

if(a\*a==b\*b+c\*c||b\*b==c\*c+a\*a||c\*c==a\*a+b\*b)

printf("the triangle is right angled");

else

printf("not a right angle");

break;

case 3:

if (a==b&&b==c)

printf("equlateral triangle");

else

printf("not an equlateral triangle");

break;

default:

printf(" \n exit ");

break;

}

}

5. #include <stdio.h>

int main()

{

int a,b,choise;

printf("Enter your choice:\n1.Addition\n2.Subtraction,\n3.multiplication,\n4.division");

scanf("%d",&choise);

switch(choise)

{

case 1:

printf("enter two numbers: ");

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

printf("the sum is:%d",a+b);

break;

case 2:

printf("enter two numbers: ");

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

printf("the subtraction is:%d",a-b);

break;

case 3:

printf("enter two numbers: ");

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

printf("the multiplication is:%d",a\*b);

break;

case 4:

printf("enter two numbers: ");

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

printf("the division is:%d",a/b);

break;

case 5:

exit(0);

default:

printf(" invalid choise ");

}

return 0;

6. #include<stdio.h>

int main()

{

int x;

printf("enter the year: ");

scanf("%d",&x);

switch(x%100)

{

case 0: switch(x%400)

{

case 0:

printf("leap year");

break;

case 1:

printf("non leap year");

break;

}

break;

case 1:switch(x%4)

{

case 0:

printf("leap year");

break;

case 1:

printf("not a leap year");

break;

}

}

}

7. #include<stdio.h>

int main()

{

float x, amt=0, total=0;

printf("enter the electricity unit: ");

scanf("%f",&x);

switch(x<=50)

{

case 1: amt=x\*0.5;

break;

case 0:switch(x<=150)

{

case 1: amt=25+(x-50)\*0.75;

break;

case 0:switch(x<=250)

{

case 1: amt=100+(x-150)\*1.20;

break;

case 0: amt=220+(x-250)\*1.5;

break;

}break;

}break;

}

total =amt+amt\*0.20;

printf("total amount = %f",total);

return 0;

}

8. #include<stdio.h>

int main()

{

int x;

printf("enter a number: ");

scanf("%d",&x);

switch(x>0)

{

case 0:

printf("the positive number is: %d",x\*-1);

break;

case 1:

printf("the negative number is: %d",x\*-1);

break;

}return 0;

}

9. #include<stdio.h>

int main()

{

int x;

printf("enter an even number: ");

scanf("%d",&x);

switch(x%2)

{

case 0:

x=x+1;

printf("the upper nearest odd number is:%d",x);

break;

case 1:

printf("read again! i asked for the even number not the odd one");

break;

return 0;

}

}

10. #include <stdio.h>

#include <math.h>

int main()

{

float a, b, c;

float root1, root2, imaginary;

float discriminant;

printf("Enter values of a, b, c of quadratic equation (aX^2 + bX + c): ");

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

discriminant = (b \* b) - (4 \* a \* c);

switch(discriminant > 0)

{

case 1:

root1 = (-b + sqrt(discriminant)) / (2 \* a);

root2 = (-b - sqrt(discriminant)) / (2 \* a);

printf("Two distinct and real roots exists: %.2f and %.2f",

root1, root2);

break;

case 0:

switch(discriminant < 0)

{

case 1:

root1 = root2 = -b / (2 \* a);

imaginary = sqrt(-discriminant) / (2 \* a);

printf("Two distinct complex roots exists: %.2f + i%.2f and %.2f - i%.2f",

root1, imaginary, root2, imaginary);

break;

case 0:

root1 = root2 = -b / (2 \* a);

printf("Two equal and real roots exists: %.2f and %.2f", root1, root2);

break;

}

}

return 0;

}