ASSIGNMENT 9

#include<stdio.h>

int main()

{

   int i;

   printf("Enter a month number:\n");

   scanf("%d",&i);

   switch(i)

   {

    case 1:

    printf("No. of days in JANUARY is 31.");

    break;

    case 2:

    printf("No. of days in FEBRUARY when it's a leap year is 29 otherwise it's 28.");

    break;

    case 3:

    printf("No. of days in MARCH is 31.");

    break;

    case 4:

    printf("No. of days in APRIL is 30.");

    break;

    case 5:

    printf("No. of days in MAY is 31.");

    break;

    case 6:

    printf("No. of days in JUNE is 30.");

    break;

    case 7:

    printf("No. of days in JULY is 31.");

    break;

    case 8:

    printf("No. of days in AUGUST is 31.");

    break;

    case 9:

    printf("No. of days in SEPTEMBER is 30.");

    break;

    case 10:

    printf("No. of days in OCTOBER is 31.");

    break;

    case 11:

    printf("No. of days in NOVEMBER is 30.");

    break;

    case 12:

    printf("No. of days in DECEMBER is 31.");

    break;

    default:

    printf("INVALID CHOICE");

   }

   return 0;

}

2. #include<stdio.h>

int main()

{

    int i,a,b;

    printf("Enter two numbers:\n");

    scanf("%d %d", &a, &b);

    printf("Press: \n1 for Addition. \n2 for Subtraction. \n3 for Multiplication. \n4 for Division.\n");

    scanf("%d",&i);

    switch(i)

    {

        case 1:

        printf("Addition of the two numbers is %d.", a+b);

        break;

        case 2:

        printf("Subtraction of the two numbers is %d.", a-b);

        break;

        case 3:

        printf("Multiplication of the two numbers is %d.", a\*b);

        break;

        case 4:

        printf("Division of the two numbers is %d.", a/b);

        break;

        default:

        printf("EXIT");

    }

    return 0;

}

3. #include<stdio.h>

int main()

{

    int i;

    printf("Enter a day number:\n");

    scanf("%d", &i);

    switch(i)

    {

        case 1:

        printf("Sunday ho ya MONDAY roz khayo ande.");

        break;

        case 2:

        printf("TUESDAY is hanuman ji ka din.");

        break;

        case 3:

        printf("It's WEDNESDAY amd everyone is hoping for a great weekend.");

        break;

        case 4:

        printf("All is well, THURSDAY will end.");

        break;

        case 5:

        printf("Pencho FRIDAY aaaa....");

        break;

        case 6:

        printf("Finally weekend has started.");

        break;

        case 7:

        printf("SUNDAY is a FUNDAY.");

        break;

        default:

        printf("7 din hi hote hai ek hfte mein \*\*\*\*.");

    }

    return 0;

}

4. #include<stdio.h>

int main()

{

    int i,a,b,c;

    printf("Enter 3 sides of an triangle:\n");

    scanf("%d %d %d", &a, &b, &c);

    printf("PRESS:\n1 for ISOSCELES.\n2 for RIGHT-ANGLED.\n3 for EQUILATERAL.\n");

    scanf("%d", &i);

    switch(i)

    {

        case 1:

        if(a==b || b==c || c==a)

        printf("It's an ISOSCELES TRIANGLE.");

        else

        printf("It's not an ISOSCELES TRIANGLE");

        break;

        case 2:

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

        printf("It's an RIGHT-ANGLED TRIANGLE.");

        else

        printf("It's not an RIGHT-ANGLED TRIANGLE");

        break;

        case 3:

        if(a==b && b==c && c==a)

        printf("It's an EQUILATERAL TRIANGLE.");

        else

        printf("It's not an EQUILATERAL TRIANGLE");

        break;

        default:

        printf("EXIT");

    }

    return 0;

}

5. #include<stdio.h>

int main()

{

    int i;

    printf("Enter a no.\n");

    scanf("%d", &i);

    switch(i)

    {

        case 1:

        printf("good");

        break;

        case 2:

        printf("better");

        break;

        case 3:

        printf("best");

        break;

        default:

        printf("invalid");

        break;

    }

    return 0;

}

20)/100;

            printf("Total electricity bill = %lf", amt);

            break;

        default:

            printf("invalid");

    }

    return 0;

}

6. #include<stdio.h>

int main()

{

    int year, y;

    printf("Enter a year\n");

    scanf("%d",&year);

    y=year%4==0 || year%400==0 || year%100==0;

    switch(y)

    {

        case 1:

        printf("It is a leap year.");

        break;

        case 0:

        printf("It is not a leap year.");

        break;

        default:

        printf("It is not a leap year.");

        break;

    }

    return 0;

}

7. #include<stdio.h>

int main()

{

    int i, n;

    double r, amt;

    printf("PRESS:\n1 is units are less than or equal 50.\n2 if units are more than 50 but less than 150.\n3 if units are more than 150 and less than 250.\n4 if units are more than 250.\n");

    scanf("%d", &i);

    printf("Enter your electricity units:\n");

    scanf("%d", &n);

    switch(i)

    {

        case 1:

            r=(n\*0.50);

            amt=(r\*20)/100;

            printf("Total electricity bill = %lf", amt);

            break;

        case 2:

            r=(50\*0.50)+((n-50)\*0.75);

            amt=(r\*20)/100;

            printf("Total electricity bill = %lf", amt);

            break;

        case 3:

            r=(50\*0.50)+(100\*0.75)+((n-150)\*1.20);

            amt=(r\*20)/100;

            printf("Total electricity bill = %lf", amt);

            break;

        case 4:

            r=(50\*0.50)+(100\*0.75)+(100\*1.20)+((n-250)\*1.50);

            amt=(r\*20)/100;

            printf("Total electricity bill = %lf", amt);

            break;

        default:

            printf("invalid");

    }

    return 0;

}

8. #include<stdio.h>

int main()

{

    int n,i;

    printf("Enter a no.:\n");

    scanf("%d", &n);

    i = n>=0;

    switch(i)

    {

        case 1:

        printf("%d", n\*(-1));

        break;

        case 0:

        printf("%d", n\*(-1));

        break;

        default:

        printf("Invalid");

    }

    return 0;

}

9. #include<stdio.h>

int main()

{

    int n,i;

    printf("Enter a number:\n");

    scanf("%d", &n);

    i=n%2==0;

    switch(i)

    {

        case 1:

        printf("%d", n+1);

        break;

        case 0:

        printf("It's an odd number");

        break;

        default:

        printf("It's an odd number");

    }

    return 0;

}

10. #include<stdio.h>

#include<math.h>

int main()

{

    int i;

    double a,b,c,d,y1,y2;

    printf("Enter a, b, c of the quadratic equation:\n");

    scanf("%lf%lf%lf", &a, &b, &c);

    printf("Quadratic equation is: %lfx2 + %lfx + %lf.\n",a,b,c);

    d=((b\*b)-(4\*a\*c));

    printf("Discriminant(D) is %lf.\n", d);

    printf("PRESS:\n1 if D>0.\n2 is D=0.\n3 if D<0.\n");

    scanf("%d",&i);

    switch(i)

    {

        case 1:

        printf("Roots are REAL & UNEQUAL\n");

        y1=((-b)+(sqrt(d)))/(2\*a);

        y2=((-b)-(sqrt(d)))/(2\*a);

        printf("First root is %lf and Second root is %lf.", y1,y2);

        break;

        case 2:

        printf("Roots are REAL & EQUAL\n");

        y1=((-b)+(sqrt(d)))/(2\*a);

        y2=((-b)-(sqrt(d)))/(2\*a);

        printf("First root is %lf and Second root is %lf.", y1,y2);

        break;

        case 3:

        printf("Roots are IMAGINARY & UNEQUAL\n");

        double r1=(sqrt(d\*(-1)))/(2\*a);

        double r2=(sqrt(d\*(-1)))/(2\*a);

        y1=(-b)/(2\*a);

        y2=(-b)/(2\*a);

        printf("First root is %lf+%lfi and Second root is %lf-%lfi.", y1,r1,y2,r2);

        break;

        default:

        printf("invalid");

    }

    return 0;

}