

(1)

```
#include<stdio.h>

int main()
{
    int n;
    printf("Enter month number\n");
    scanf("%d",&n);
    switch(n)
    {
        case 1:
            printf("January,number of days is 31");
            break;
        case 2:
            printf("February: Number of days is 28/29");
            break;
        case 3:
            printf("March,Number of days is 31");
            break;
        case 4:
            printf("April: Number of days is 30");
            break;
        case 5:
            printf("May: Number of days is 31");
            break;
        case 6:
            printf("June: Number of days is 30");
            break;
        case 7:
            printf("July: Number of days is 31");
```

```
        break;
case 8:
    printf("August: Number of days is 31");
    break;
case 9: printf("September: Number of days is 30");
    break;

case 10:
    printf("October: Number of days is 31");
    break;
case 11: printf("November: Number of days is 30");
    break;
case 12: printf("December: Number of days is 31");
    break;
default :
    printf("Invalid no.");
}
}
```

(2)

```
#include<stdio.h>

int main()
{
    int choice,a,b,c;
    while(1)
    {
        printf("1.Addition\n");
        printf("2.Substraction\n");
        printf("3.Multiplication\n");
        printf("4.division\n");
```

```
printf("5.Exit\n");
scanf("%d",&choice);
switch(choice)
{
    case 1: printf("Enter 2 number\n");
        scanf("%d %d",&a,&b);
        c=a+b;
        printf("Addition =%d\n",c);
        break;
    case 2:
        printf("Enter 2 number\n");
        scanf("%d %d",&a,&b);
        c=a-b;
        printf("Substraction=%d\n",c);
        break;
    case 3:printf("Enter 2 number\n");
        scanf("%d %d",&a,&b);
        c=a*b;
        printf("Multiplication = %d\n",c);
        break;
    case 4:
        printf("Enter 2 number\n");
        scanf("%d %d",&a,&b);
        c=a/b;
        printf("Division = %d\n",c);
        break;
    case 5:
        return 0;
}
```

```
    }return 0;
}
```

(3)

```
#include<stdio.h>

int main()
{
    int x;
    printf("Enter week day number\n");
    scanf("%d",&x);
    switch(x)
    {
    case 1:
        printf("Hello\n Its holiday beacuse today is Sunday");
        break;
    case 2:
        printf("Hello,Good morning its Monday");
        break;
    case 3:
        printf("Jai Sri Ram\n Its tuesday");
        break;
    case 4:
        printf("Hello Good morning, its Wednesday");
        break ;
    case 5:
        printf("Good morning ,its Thursday");
        break ;
    case 6:
        printf("Have bed tea?,its friday");
        break;
```

case 7:

```
printf(" Its saturday\nAny party plan at night?");
```

```
break;
```

```
}return 0;
```

```
}
```

(4)

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
int choice,a,b,c;
```

```
while(1)
```

```
{
```

```
printf("Enter serial number for choice:\n\n");
```

```
printf("1.To check the isosceles triangle\n");
```

```
printf("2.To check the right angled triangle\n");
```

```
printf("3.To check the equilateral triangle\n");
```

```
printf("4.Exit\n\n");
```

```
scanf("%d",&choice);
```

```
switch(choice)
```

```
{
```

```
case 1:
```

```
printf("Enter three numbers\n");
```

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

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

```
printf("Triangle is isosceles\n\n");
```

```
else
```

```
printf("Not isosceles triangle\n\n");
```

```
break;
```

case 2:

```
printf("Enter three numbers\n\n");
```

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

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

```
printf("Triangle is righangle trianle\n");
```

else

```
printf("Not right angle triangle\n");
```

break;

case 3:

```
printf("Enter three numbers\n\n");
```

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

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

```
printf("Equilateral triangle\n");
```

else

```
printf("Not Equilateral triangle\n\n");
```

break;

case 4:

```
exit(1);
```

```
}
```

```
}
```

```
return 0;
```

```
}
```

(5)

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
int n;
```

```
printf("Enter a number\n");
```

```
scanf("%d",&n);
```

```

switch(n)
{
    case 1:printf("Good");
    break;
    case 2:printf("Better");
    break;
    case 3:printf("BSest");
    break;
    default :return 0;
}
return 0;
}

```

(6)

```

#include<stdio.h>

int main()
{
    int year;

    printf("Enter the Year:\n");
    scanf("%d",&year);
    switch (year%100==0)
    {
    case 0:
        switch(year%4==0)
        {
            case 0:
                printf("Non leap year\n");
                break;
            case 1:
                printf("Leap Year\n");

```

```

        break;
    }    break;
case 1:
    switch(year%400==0)
    {
        case 0:
            printf("Non leap year");
            break;
        case 1:
            printf("Leap year");
            break;
    }
}
return 0;
}

```

(7)

```

#include<stdio.h>

int main()

{
    int total,alltotal,unit =120;
    switch(50>unit)
    {
        case 0:
            switch(100>unit)
            {
                case 0:
                    total =25+(unit-50)*0.75;
                    break;

```


case 1:

```
total=50*0.50+50*0.75+(unit-100)*1.20;
```

```
break;
```

```
}break;
```

case 1:

```
total =unit*0.50;
```

```
break;
```

```
}
```

```
alltotal=total+total*0.2;
```

```
printf("Total electric bill=%d\n",alltotal);
```

```
return 0;
```

```
}
```

(8)

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
int num,newnum;
```

```
printf("Enter the number\n");
```

```
scanf("%d",&num);
```

```
newnum = ((-1)* (num));
```

```
switch(0<num)
```

```
{
```

case 0:

```
printf("Positive number is %d",newnum);
```

```
break;
```

case 1:

```
printf("Negative number is %d",newnum);
```

```
break;
```

```
} return 0;
}
```

(9)

```
#include<stdio.h>

int main()
{
    int even_num,oddnum;

    printf("Enter an even number\n");
    scanf("%d",&even_num);
    switch(even_num%2==0)
    {
        case 0:
            printf("Its not even number");
            break;
        case 1:
            oddnum=((even_num)-1);
            printf("Nearest odd number is %d",oddnum);
            break;
    }return 0;
}
```

(10)

```
#include<stdio.h>
#include<math.h>

int main()
{
    double a,b,c,root1,root2,discriminant,realPart,imagPart;

    printf("Enter the value of a b c");
    scanf("%lf %lf %lf",&a,&b,&c);
    discriminant =b*b-(4*a*c);
```

```

    switch(discriminant>0)
    {
    case 0:
        realPart = -b/(2*a);
        imagPart = sqrt(-discriminant)/(2*a);
        printf("root1 = %f+%fi and root2 = %f-%fi",realPart,imagPart,realPart,imagPart);
        break;
    case 1:
        root1=(-1*b+(sqrt(discriminant))/2*a);
        root2=(-1*b-(sqrt(discriminant))/2*a);
        printf("Roots are:\n %f %f",root1 ,root2);
        break;
    }
    switch(discriminant==0)
    {
        root1==root2== -1*b/2*a;
        printf("root=root2 = %f",root1);
        break;
        return 0;
    }
    return 0;
}

```