

1.Even or odd number

```
#include<stdio.h>

int main()
{
    int a;
    printf("Enter the value of a :\n");
    scanf("%d",&a);
    if(a%2==0)
    {
        printf("%d is an even number.\n",a);
    }
    else
    {
        printf("%d is an odd number.\n",a);
    }
    return 0;
}
```

2.Largest number among three numbers:

```
#include<stdio.h>

int main()
{
    int num1,num2,num3;
    printf("Enter the numbers : \n");
    scanf("%d%d%d",&num1,&num2,&num3);
    if(num1>num2&&num1>num3)
    {
```

```

    printf("%d is the largest number.\n",num1);
}
else if(num2>num1&&num2>num3)
{
    printf("%d is the largest number.\n",num2);
}
else
{
    printf("%d is the largest number.\n",num3);
}
return 0;
}

```

3.Grading system:

```

#include<stdio.h>

int main()
{
    int a;
    printf("Enter the number :");
    scanf("%d",&a);
    if(a>=80)
    {
        printf("A+");
    }
    else if(a>=70)
    {
        printf("A");
    }
}

```

```

    }
    else if(a>=60)
    {
        printf("A-");
    }
    else if(a>=50)
    {
        printf("B");
    }
    else if(a>=40)
    {
        printf("C");
    }
    else
    {
        printf("F");
    }
    return 0;
}

```

4 .Whether an integer number is positive ,negative or neutral:

```

#include<stdio.h>

int main()
{
    int a;

    printf("Enter the number :");

    scanf("%d",&a);

```

```

if(a>=1)
{
    printf("The number is a positive integer.\n");
}
else if(a==0)
{
    printf("The number is neutral.\n");
}
else
{
    printf("The number is a negative integer.\n");
}
return 0;
}

```

5.Whether a character is vowel or consonant

```

#include<stdio.h>

int main()
{
    char sign ;
    printf("Enter the character :");
    scanf("%c",&sign);
    if(sign=='a' || sign=='e' || sign=='i' || sign=='o' || sign=='u')
    {
        printf("%c is a vowel.\n",sign);
    }
    else
    {

```

```
    printf("%c is a consonant",sign);  
}  
return 0;  
}
```

6.Whether an integer prime or not:

```
#include<stdio.h>  
  
int main()  
{  
    int a,i,k=0;  
    printf("Enter the number :");  
    scanf("%d",&a);  
    for(i=1;i<=a;i++)  
    {  
        if(a%i==0)  
        {  
            k=k+1;  
        }  
    }  
    if(k==2)  
    {  
        printf("%d is a prime number.\n",a);  
    }  
    else  
    {  
        printf("%d is not a prime number.\n",a);  
    }  
    return 0;  
}
```

```
}
```

7. Whether eligible to cast vote or not:

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

```
int main()
```

```
{
```

```
    int a;
```

```
    printf("Enter the age :");
```

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

```
    if(a>=18)
```

```
    {
```

```
        printf("Eligible to cast vote.\n");
```

```
    }
```

```
    else
```

```
    {
```

```
        printf("Not eligible.\n");
```

```
    }
```

```
    return 0;
```

```
}
```

8. Write a C program to read the value of an integer m and display the value of n is 1 when m is larger than 0, 0 when m is 0 and -1 when m is less than 0 :

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

```
int main()
```

```
{
```

```
    int m,n;
```

```

printf("Enter the number :");
scanf("%d",&m);
if(m>=1)
{
    printf("n=1.\n");
}
else if(m==0)
{
    printf("n=0.\n");
}
else
{
    printf("n=-1.\n");
}
return 0;
}

```

9. C program to accept the height of a person in centimeters and categorize the person according to their height.

```

#include<stdio.h>

int main()
{
    int h;
    printf("Enter height in centimeters :");
    scanf("%d",&h);
    if(h<150)
    {
        printf("Dwarf.\n");
    }
}

```

```
}  
else if(h==150)  
{  
    printf("Average height.\n");  
}  
else  
{  
    printf("Tall.\n");  
}  
return 0;  
}
```

10. C program to read temperature in centigrade and display a suitable message according to the temperature state below:

```
#include<stdio.h>  
  
int main()  
{  
    int t;  
    printf("Enter the temperature :");  
    scanf("%d",&t);  
    if(t<0)  
    {  
        printf("Freezing weather.\n");  
    }  
    else if(0<=t&& t<10)  
    {  
        printf("Very cold weather.\n");  
    }  
}
```



```

}
else if(10<=t&& t<20)
{
    printf("Cold weather.\n");
}
else if(20<=t&& t<30)
{
    printf("Normal in temperature.\n");
}
else if(30<=t&& t<40)
{
    printf("Hot weather.\n");
}
else
{
    printf("Very hot weather.\n");
}
return 0;
}

```

11. C program to check whether a triangle can be formed with the given values for the angles.

```

#include<stdio.h>

int main()
{
    int a,b,c;

    printf("Enter the value of the angles a,b,c :\n");
    scanf("%d%d%d",&a,&b,&c);

```

```
if(a+b+c==180)
{
    printf("Triangle is possible.\n");
}
else
{
    printf("Triangle is not possible.\n");
}

return 0;
}
```

12. C program to check whether a character is an alphabet, digit or special character.

```
#include<stdio.h>

int main()
{
    char sign;

    printf("Enter the character :");
    scanf("%c",&sign);
    if((sign>='a'&&sign<='z') || (sign>='A'&&sign<='Z'))
    {
        printf("%c is an alphabet.\n",sign);
    }
    else if(sign>='0'&&sign<='9')
    {
        printf("%c is a digit.\n",sign);
    }
    else
```

```
{  
    printf("%c is a special character.\n",sign);  
}
```

```
return 0;
```

```
}
```

13. C to accept a grade and declare the equivalent description

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

```
int main()
```

```
{
```

```
    char grade;
```

```
    printf("Enter the grade :");
```

```
    scanf("%c",&grade);
```

```
    if(grade=='E')
```

```
    {
```

```
        printf("Excellent.\n");
```

```
    }
```

```
    else if(grade=='V')
```

```
    {
```

```
        printf("Very good.\n");
```

```
    }
```

```
    else if(grade=='G')
```

```
    {
```

```
        printf("Good.\n");
```

```
    }
```

```
    else if(grade=='A')
```

```
{  
    printf("Average.\n");  
}  
  
else  
{  
    printf("Fail.\n");  
}  
  
return 0;  
}
```

14. C program to read any day number in integer and display the day name in word format

```
#include<stdio.h>  
  
int main()  
{  
    int d;  
    printf("Enter the number of day:");  
    scanf("%d",&d);  
    if(d==1)  
    {  
        printf("Monday.\n");  
    }  
    else if(d==2)  
    {  
        printf("Tuesday.\n");  
    }  
}
```

```
else if(d==3)
{
    printf("Wednesday.\n");
}
else if(d==4)
{
    printf("Thursday.\n");
}
else if(d==5)
{
    printf("Friday.\n");
}
else if(d==6)
{
    printf("Saturday.\n");
}
else if(d==7)
{
    printf("Sunday.\n");
}
else
{
    printf("Not valid.\n");
}
return 0;
}
```

15.C program to generate the following star pattern(1):

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

```
int main()
```

```
{
```

```
    int i,j;
```

```
    for(i=1;i<=5;i++)
```

```
    {
```

```
        for(j=1;j<=5;j++)
```

```
        {
```

```
            printf("* ");
```

```
        }
```

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

```
    }
```

```
return 0;
```

```
}
```

output

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

16.C program to generate the following star pattern(2):

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

```
int main()
```

```
{
```

```
    int i , j;
```

```
    for(i=1 ;i<=5;i++)
```

```
    {
```

```
        for(j=1;j<=i;j++)
```

```
        {
```

```
            printf("* ");
```

```
        }
```

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

```
    }
```

output

```
*
* *
* * *
* * * *
* * * * *
```

```
return 0;
```

```
}
```

17. C program to generate the following numeric pattern(1):

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

```
int main()
```

output

1

```
{
```

1 2

```
int i,j;
```

1 2 3

```
for(i=1;i<=5;i++)
```

1 2 3 4

```
{
```

1 2 3 4 5

```
for(j=1;j<=i;j++)
```

```
{
```

```
printf("%d",j);
```

```
}
```

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

```
}
```

```
return 0;
```

```
}
```

18. C program to generate the following numeric pattern(2):

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

output

1

```
int main()
```

2 2

```
{
```

3 3 3

```
int i,j;
```

4 4 4 4

```
for(i=1;i<=6;i++)
```

5 5 5 5 5

```
{
```

6 6 6 6 6 6

```
for(j=1;j<=i;j++)
```

```
{
```

```
        printf("%d",i);
    }
    printf("\n");
}
return 0;
}
```

19.C program to display the sum of n terms of even natural numbers

```
#include<stdio.h>

int main()
{
    int n,i,sum=0;
    printf("Enter the value of n.\n");
    scanf("%d",&n);
    printf("The even numbers are :\n");
    for(i=1;i<=n;i++)
    {
        printf("%d\n",2*i);
        sum=sum+(2*i);
    }
    printf("The sum of the n even numbers is : %d",sum);
    return 0;
}
```

20. C program that displays the n terms of square natural numbers and their sum.

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



```

int main()
{
    int n,i,sum=0;
    printf("Enter the value of n.\n");
    scanf("%d",&n);
    printf("The squares of the n numbers are :\n");
    for(i=1;i<=n;i++)
    {
        printf("%d\n",i*i);
        sum=sum+(i*i);
    }
    printf("The sum of the square of n numbers is : %d",sum);
    return 0;
}

```

21. Write a program in C to find the sum of the series 1 +11 + 111 + 1111 + ... n terms.

```

#include<stdio.h>

int main()
{
    int n,i,t,sum=0;
    t=1;
    printf("Enter the value of n.\n");
    scanf("%d",&n);
    printf("The series of n term is:\n");
    for(i=1;i<=n;i++)
    {
        printf("%d",t);
    }
}

```

```

    if(i<n)
    {
        printf("+");
    }
    sum=sum+t;
    t=(t*10)+1;
}
printf("\n");
printf("The sum of the n term is : %d",sum);
return 0;
}

```

22.Whether the entered number is perfect or not:

```

#include<stdio.h>

int main()
{
    int n,i,sum=0;
    printf("Enter the number.\n");
    scanf("%d",&n);
    printf("The divisors of n are :\n");
    for(i=1;i<=n;i++)
    {
        if(n%i==0)
        {
            printf("%d\n",i);
            sum=sum+i;
        }
    }
}

```

```

if(sum-n==n)/*As we can not add the entered number in the sum.*/
{
    printf("%d is a perfect number",n);
}
else
{
    printf("%d is not a perfect number",n);
}

return 0;

}

```

23.N terms Fibonacci number :

```

#include<stdio.h>

int main()
{
    int n,i,c,a=0,b=1;
    printf("Enter the value of n.\n");
    scanf("%d",&n);
    printf("The n term fibonacci numbers are :\n");
    printf("%d",a);
    printf(" ");
    printf("%d",b);
    printf(" ");
    for(i=3;i<=n;i++)
    {
        c=a+b;

```

```
printf("%d",c );  
printf(" ");  
a=b;  
b=c;  
}  
return 0;  
}
```

24. Program in C to display the number in reverse order.

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

```
int main()
```

input : 123456789

```
{
```

output : 987654321

```
int i,n,rev=0;
```

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

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

```
for( i=n;i>0;i=i/10)
```

```
{
```

```
    rev=rev*10+i%10;
```

```
}
```

```
printf("The reverse number is : %d",rev);
```

```
return 0;
```

```
}
```