

Determine whether the number is even or odd

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

```
int main ()
```

```
{
```

```
    int a;
```

```
    printf("Enter the value of a:");
```

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

```
    if(a%2==1)
```

```
    {
```

```
        printf("Entered number is odd");
```

```
    }
```

```
    else
```

```
    {
```

```
        printf("Entered number is even");
```

```
    }
```

```
    return 0;
```

```
}
```

Determine the largest among three numbers

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

```
int main ()
```

```
{
```

```
int num1,num2,num3;
```

```
printf("Enter 3 numbers/n");
```

```
scanf("%d%d%d",&num1,&num2,&num3);
```

```
if(num1>num2&&num1>num3){
```

```
printf("%d is greater",num1);
```

```
}
```

```
else if (num2>num1&&num2>num3){
```

```
printf("%d is greater",num2);
```

```
}
```

```
else{
```

```
printf("%d is greater",num3);
```

```
}
```

```
return 0;
```

```
}
```

Grading system

```
#include<stdio.h>

int main ()
{
    int a;
    printf("Enter the value of a:");
    scanf("%d",&a);
    if(a>=81)
    {
        printf("A+");
    }
    else if (a>=71)
    {
        printf("A");
    }
    else if (a>=61)
    {
        printf("A-");
    }
}
```

Grading system-Continue

```
else if (a>=51)
{
    printf("B");
}
else if (a>=41)
{
    printf("C");
}
else
{
    printf("F");
}
return 0;
}
```

Determine whether an integer is positive, neutral or negative

```
#include<stdio.h>
int main ()
{
    int a;
    printf("Enter the value of a:");
    scanf("%d",&a);
    if(a>=1)
    {
        printf("The entered number is
positive");
    }
    else if(a==0)
    {
        printf("Entered number is neutral");
    }
    else
    {
        printf("The entered number is
negative");
    }
    return 0;
}
```

Determine whether an integer is positive, neutral or negative

```
#include<stdio.h>
int main ()
{
    int a;
    printf("Enter the value of a:");
    scanf("%d",&a);
    if(a>=1)
    {
        printf("The entered number is positive");
    }
    else if(a==0)
    {
        printf("Entered number is neutral");
    }
    else
    {
        printf("The entered number is negative");
    }
    return 0;
}
```

Determine whether a character is vowel or constant

```
#include<stdio.h>

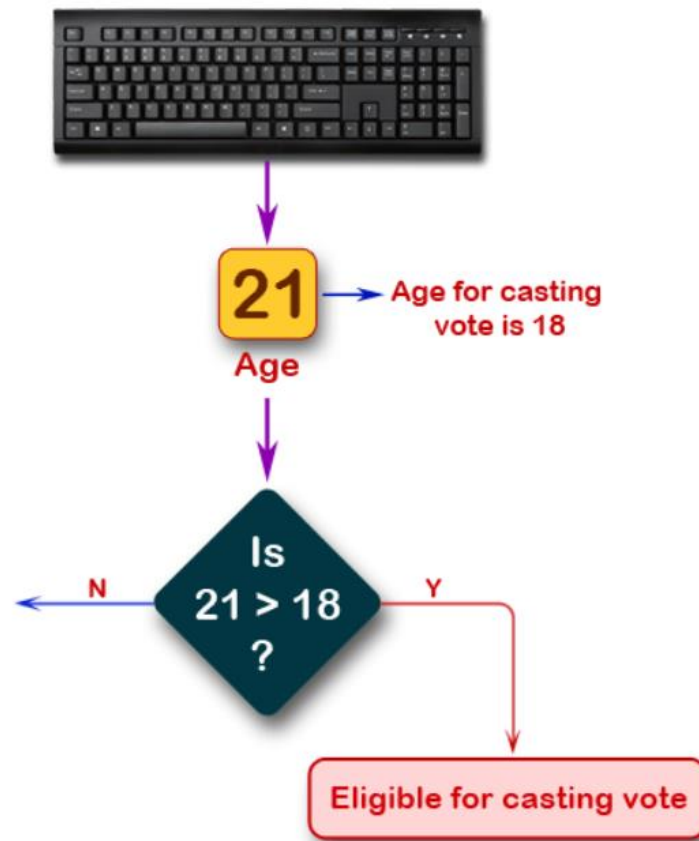
int main ()
{
    char a;
    scanf("%c",&a);
    if(a=='a' || a=='e' || a=='i' || a=='o' || a=='u')
    {
        printf("The character is a vowel\n");
    }
    else
    {
        printf("The character is a consonent");
    }
    return 0;
}
```

Assignment

Determine whether an integer is prime or not

Assignment 1

Assignment 2: Write a C program to read the age of a candidate and determine whether he is eligible to cast his/her own vote.



Assignment 2

Assignment 3: 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.

Solved Assignment 3

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

- Height < 150 → Dwarf
- Height = 150 → Average height
- Height > = 165 → Tall

Assignment 4

- Write a C program to read temperature in centigrade and display a suitable message according to the temperature state below: Go to the editor
Temp < 0 then Freezing weather
Temp 0-10 then Very Cold weather
Temp 10-20 then Cold weather
Temp 20-30 then Normal in Temp
Temp 30-40 then Its Hot
Temp ≥ 40 then Its Very Hot

Test Data :

42

Expected Output :

Its very hot.

Solved Assignment 5

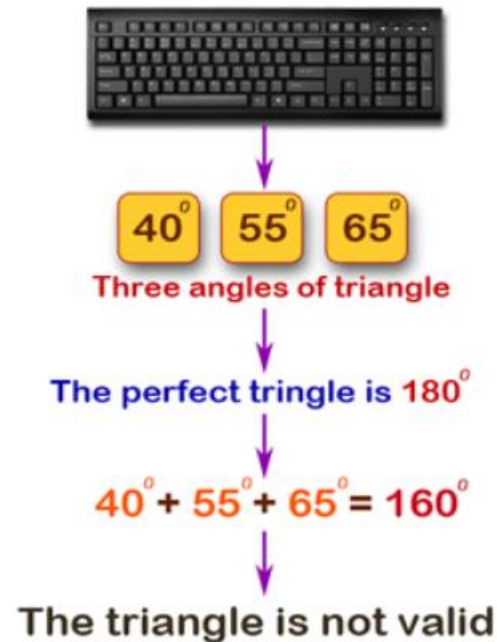
Write a C program to check whether a triangle can be formed with the given values for the angles.

Test Data :

40 55 65

Expected Output :

The triangle is not valid.



Solved Assignment 7

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

```
#include <stdio.h>
int main()
{
    char sing_ch;

    printf("Input a character: ");
    scanf('%c', &sing_ch);

    /* Checks whether it is an alphabet */
    if((sing_ch>='a' && sing_ch<='z') || (sing_ch>='A' && sing_ch<='Z'))
    {
        printf("This is an alphabet.\n");
    }
}
```

Solved Assignment 8

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

```
else if(sing_ch>='0' && sing_ch<='9') /* whether it is digit */
{
    printf("This is a digit.\n");
}
else /* Else special character */
{
    printf("This is a special character.\n");
}
}
```

Solved Assignment 10

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

```
else if(sing_ch>='0' && sing_ch<='9') /* whether it is digit */
{
    printf("This is a digit.\n");
}
else /* Else special character */
{
    printf("This is a special character.\n");
}
}
```

Sample Output:

Input a character: @
This is a special character.

Assignment 11

Write a C program to check whether an alphabet is a vowel or a consonant.

Assignment 12

Write a program in *C* to accept a grade and declare the equivalent description

Grade	Description
E	Excellent
V	Very Good
G	Good
A	Average
F	Fail

Assignment 13

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

Test Data :

4

Expected Output :

Thursday

Assignment 1

Write a C program to generate the following star pattern.

```
#include<stdio.h>
int main ()
{
for(i=0; i<5; i++) {
    for(j=0; j<5; j++)
    {
        printf("*");
        printf(" ");
    }
    printf("\n");
}
return 0
}
```


Assignment 2

Write a C program to generate the following star pattern.

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

```
int main ()
```

```
{
```

```
int i, j;
```

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

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

```
    {
```

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

```
    }
```

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

```
}
```

```
return 0
```

```
}
```

```
*
```

```
**
```

```
***
```

```
****
```

```
*****
```

Assignment 3

Write a C program to generate the following numeric pattern.

```
#include <stdio.h>
int main() {
    int i;
    for(int i=1;i<=5;i++)
    {
        for(int j=1;j<=i;j++)
        {
            printf("%d ",j);
        }
        printf("\n");
    }
}
```

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

Solved Assignment 4

Write a C program to generate the following numeric pattern.

```
#include<stdio.h>
#include<conio.h>
int main()
{
int n, i, j;
printf("Enter the number of rows: ");
scanf("%d",&n);
for(i = 1; i <= n; i++)
{
for(j = 1; j <= i; j++)
{
printf("%d",i);
}
printf("\n");
}
return 0;
}
```

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
6 6 6 6 6 6
```

Assignment 5

Write a C program to display the sum of n terms of even natural numbers

Test Data :

Input number of terms : 5

Expected Output :

The even numbers are :2 4 6 8 10

The Sum of even Natural Number upto 5 terms : 30

Assignment 6

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

Test Data :

Input the number of terms : 5

Expected Output :

The square natural upto 5 terms are :1 4 9 16 25

The Sum of Square Natural Number upto 5 terms = 55

Assignment 7

Write a C program to display the sum of n terms of even natural numbers

Test Data :

Input number of terms : 5

Expected Output :

The even numbers are :2 4 6 8 10

The Sum of even Natural Number upto

5 terms : 30

Solved Assignment 8

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

```
#include <stdio.h>

void main()
{
    int n,i;
    long sum=0;
    long int t=1;
    printf("Input the number of terms : ");
    scanf("%d",&n);
```

Assignment 8-code continue

```
for(i=1;i<=n;i++)
{
    printf("%ld ",t);
    if (i<n)
    {
        printf("+ ");
    }

    sum=sum+t;
    t=(t*10)+1;
}
printf("\nThe Sum is : %ld\n",sum);
}
```

Assignment 9

Write a C program to check whether a given number is a 'Perfect' number or not.

Perfect number, a positive integer that is equal to the sum of its proper divisors. The smallest perfect number is 6, which is the sum of 1, 2, and 3.

Perfect Number

Divisor of 28 : 1, 2, 4, 7, 14, 28

Sum of 1 + 2 + 4 + 7 + 14 = 28

Sum = Original Number

28 is Perfect number

Assignment 10 (Solved)

Write a C program to check whether a given number is a 'Perfect' number or not.

perfect number, a positive integer that is equal to the sum of its proper divisors. The smallest perfect number is 6, which is the sum of 1, 2, and 3.

```
#include <stdio.h>

void main()
{
    int n,i,sum;
    int mn,mx;

    printf("Input the number : ");
    scanf("%d",&n);
    sum = 0;
    printf("The positive divisor : ");
```

Assignment 10-continue

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

```
{
```

```
if(n%i==0)
```

```
{
```

```
sum=sum+i;
```

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

```
}
```

```
}
```

```
printf("\nThe sum of the divisor is : %d",sum);
```

```
if(sum==n)
```

```
printf("\nSo, the number is perfect.");
```

```
else
```

```
printf("\nSo, the number is not perfect.");
```

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

```
}
```

Assignment 11

Write a program in C to display the first n terms of the Fibonacci series. Fibonacci series 0 1 2 3 5 8 13

Test Data :

Input number of terms to display : 10

Expected Output :

Here is the Fibonacci series upto to 10 terms :

0 1 1 2 3 5 8 13 21 34

Assignment 12

Write a program in C to display the number in reverse order.

Test Data :

Input a number: 12345

Expected Output :

The number in reverse order is : 54321