

```
1 #include <stdio.h>
2
3 int main() {
4     for (char i = 0; i <= 126; i++) {
5         printf("The ASCII value of %c is %d \n", i, i);
6     }
7
8     return 0;
9 }
```

```
1 #include <stdio.h>
2 #define BASE 10
3
4 int main()
5 {
6     long long num, n;
7     int i, lastDigit;
8     int freq[BASE];
9
10    printf("Enter any number: ");
11    scanf("%lld", &num);
12
13    for(i=0; i<BASE; i++)
14    {
15        freq[i] = 0;
16    }
17
18    n = num;
19
20    while(n != 0)
21    {
22        lastDigit = n % 10;
23
24        n /= 10;
25
26        freq[lastDigit]++;
27    }
28
29    printf("Frequency of each digit in %lld is: \n", num);
30    for(i=0; i<BASE; i++)
31    {
32        printf("Frequency of %d = %d\n", i, freq[i]);
33    }
34
35    return 0;
36 }
```

```
1 #include <stdio.h>
2 int main()
3 {
4     int i, j, end, sum;
5     printf("Enter upper limit: ");
6     scanf("%d", &end);
7     printf("All Perfect numbers between 1 to %d:\n", end);
8     for(i=1; i<=end; i++)
9     {
10         sum = 0;
11         for(j=1; j<i; j++)
12         {
13             if(i % j == 0)
14             {
15                 sum += j;
16             }
17         }
18         if(sum == i)
19         {
20             printf("%d, ", i);
21         }
22     }
23     return 0;
24 }
```

```
1 #include<stdio.h>
2     int main()
3 {
4     int n,r,sum=0,temp;
5     printf("enter the number=");
6     scanf("%d",&n);
7     temp=n;
8     while(n>0)
9     {
10        r=n%10;
11        sum=sum+(r*r*r);
12        n=n/10;
13    }
14    if(temp==sum)
15        printf("armstrong number ");
16    else
17        printf("not armstrong number");
18    return 0;
19 }
```

```
1 #include<stdio.h>
2
3 int main(){
4
5     int num,i,count,n;
6     printf("Enter max range: ");
7     scanf("%d",&n);
8
9     for(num = 1;num<=n;num++){
10
11         count = 0;
12
13         for(i=2;i<=num/2;i++){
14             if(num%i==0){
15                 count++;
16                 break;
17             }
18         }
19
20         if(count==0 && num!= 1)
21             printf("%d ",num);
22     }
23
24     return 0;
25 }
```

```
1 #include <stdio.h>
2 int main() {
3     int a, b, x, y, t, gcd, lcm;
4
5     printf("Enter two integers\n");
6     scanf("%d%d", &x, &y);
7
8     a = x;
9     b = y;
10
11    while (b != 0) {
12        t = b;
13        b = a % b;
14        a = t;
15    }
16
17    gcd = a;
18    lcm = (x*y)/gcd;
19
20    printf("Greatest common divisor
21          of %d and %d = %d\n", x, y, gcd);
22    printf("Least common multiple of
23          %d and %d = %d\n", x, y, lcm);
24
25    return 0;
26 }
```

```
1 #include<stdio.h>
2 void main() {
3     float a ,b,c ;
4     printf("Enter the hight of the
5         triangle \n");
6     scanf("%f",&a);
7     printf("Enter the base of the
8         triangle\n");
9     scanf("%f",&b);
10    c = 0.5*a*b;
11    printf("Area of the triangle is
12        %.3f",c);
13 }
```

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int i, j, cur, lastDigit, end;
6     long long fact, sum;
7
8     printf("Enter upper limit: ");
9     scanf("%d", &end);
10
11    printf("All Strong numbers between 1 to %d are:\n", end);
12
13    for(i=1; i<=end; i++)
14    {
15        cur = i;
16
17        sum = 0;
18
19        while(cur > 0)
20        {
21            fact = 1;
22            lastDigit = cur % 10;
23
24            for( j=1; j<=lastDigit; j++)
25            {
26                fact = fact * j;
27            }
28
29            sum += fact;
30
31            cur /= 10;
32        }
33
34        if(sum == i)
35        {
36            printf("%d, ", i);
37        }
38    }
39
40    return 0;
41 }
```

```
1 #include <stdio.h>
2 int main() {
3
4     int i, n;
5
6     int t1 = 0, t2 = 1;
7
8     int nextTerm = t1 + t2;
9
10    printf("Enter the number of
11        terms: ");
12
13    scanf("%d", &n);
14
15    for (i = 3; i <= n; ++i) {
16        printf("%d, ", nextTerm);
17        t1 = t2;
18        t2 = nextTerm;
19        nextTerm = t1 + t2;
20    }
21
22    return 0;
23 }
```

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int base, exponent;
6     long long power = 1;
7     int i;
8
9     printf("Enter base: ");
10    scanf("%d", &base);
11    printf("Enter exponent: ");
12    scanf("%d", &exponent);
13
14    for(i=1; i<=exponent; i++)
15    {
16        power = power * base;
17    }
18
19    printf("%d ^ %d = %lld", base,
20           exponent, power);
21
22 }
```

```
1 #include <stdio.h>
2 int main() {
3     int n, reversed = 0, remainder,
4         original;
5     printf("Enter an integer: ");
6     scanf("%d", &n);
7     original = n;
8     while (n != 0) {
9         remainder = n % 10;
10        reversed = reversed * 10 +
11            remainder;
12    }
13
14    if (original == reversed)
15        printf("%d is a
16    palindrome.", original);
17    else
18        printf("%d is not a
19    palindrome.", original);
20 }
```

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int week;
6
7     printf("Enter week number : ");
8     scanf("%d", &week);
9
10    switch(week)
11    {
12        case 1:
13            printf("Monday");
14            break;
15        case 2:
16            printf("Tuesday");
17            break;
18        case 3:
19            printf("Wednesday");
20            break;
21        case 4:
22            printf("Thursday");
23            break;
24        case 5:
25            printf("Friday");
26            break;
27        case 6:
28            printf("Saturday");
29            break;
30        case 7:
31            printf("Sunday");
32            break;
33        default:
34            printf("Invalid input! Please enter week number between 1-7.");
35    }
36
37    return 0;
38 }
```

```
1 #include<stdio.h>
2 void main() {
3     int a,b,c;
4     printf("Enter the first angle of the triangle \n");
5     scanf("%d",&a);
6     printf("Enter the second angle of the triangle \n");
7     scanf("%d",&b);
8     c = 180-a-b;
9     printf("Third angle of the triangle is %d",c);
10
11
12 }
```

```
1 #include <stdio.h>
2 int main()
3 {
4     int length ;
5     printf("Enter the length of the array");
6     scanf("%d",&length);
7     int arr1[length];
8     printf("Enter the elements of the array");
9     for(int i=0; i<5; i++) {
10         scanf("%d",&arr1[i]);
11     }
12     int arr2[length];
13
14     for (int i = 0; i < length; i++) {
15         arr2[i] = arr1[i];
16     }
17
18     printf("Elements of original array: \n");
19     for (int i = 0; i < length; i++) {
20         printf("%d ", arr1[i]);
21     }
22
23     printf("\n");
24
25     printf("Elements of new array: \n");
26     for (int i = 0; i < length; i++) {
27         printf("%d ", arr2[i]);
28     }
29     return 0;
30 }
```

```
1 #include <stdio.h>
2 int main()
3 {
4     int arr[100];
5     int pos, n ;
6     printf("Enter the length of the array\n");
7     scanf("%d",&n);
8     printf("Enter the elements of the array\n");
9
10    for(int i=0; i<n; i++) {
11        scanf("%d",&arr[i]);
12    }
13
14    printf("Array is - \n");
15    for (int i = 0; i < 100; i++) {
16        arr[i] = i + 1;
17    }
18
19    for (int i = 0; i < n; i++) {
20        printf("%d ", arr[i]);
21    }
22    printf("\n");
23
24    printf("enter the position on which you want to insert the element\n");
25    scanf("%d",&pos);
26
27    int x ;
28    printf("enter the element which you want to insert the element\n");
29    scanf("%d",&x);
30
31    n++;
32
33    for (int i = n - 1; i >= pos; i--)
34        arr[i] = arr[i - 1];
35
36    arr[pos - 1] = x;
37
38    for (int i = 0; i < n; i++)
39        printf("%d ", arr[i]);
40    printf("\n");
41
42    return 0;
43 }
```

```
1 #include <stdio.h>
2 void main()
3 {
4
5     int a[100],i,j,n,temp;
6
7     printf ("Enter the number of elements");
8     scanf ("%d",&n);
9
10    printf("Enter the values");
11
12
13    for (i=0;i<n;i++){
14        scanf("%d",&a[i]);
15    }
16
17    for(i=0;i<n;i++)
18    {
19        for(j=i+1;j<n;j++)
20        {
21            if(a[i]>a[j])
22            {
23                temp = a[i];
24                a[i]=a[j];
25                a[j]=temp;
26            }
27        }
28
29    }
30
31    printf("Second largest element is %d",a[n-2]);
32
33 }
```

```
1 #include <stdio.h>
2 int main()
3 {
4     int arr[10], i, j, Size, Count = 0;
5
6     printf("\n Please Enter Number of elements in an array : ");
7     scanf("%d", &Size);
8     printf("\n Please Enter %d elements of an Array : ", Size);
9     for (i = 0; i < Size; i++)
0     {
1         scanf("%d", &arr[i]);
2     }
3
4     for (i = 0; i < Size; i++)
5     {
6         for(j = i + 1; j < Size; j++)
7         {
8             if(arr[i] == arr[j])
9             {
10                 Count++;
11                 break;
12             }
13         }
14     }
15     printf("\n Total Number of Duplicate Elements in this Array = %d ", Count);
16     return 0;
17 }
```

```
1 #include<stdio.h>
2
3 int main()
4 {
5     int arr[100], size, i, sum = 0;
6
7     printf("Enter array size\n");
8     scanf("%d",&size);
9
10    printf("Enter array elements\n");
11    for(i = 0; i < size; i++)
12        scanf("%d",&arr[i]);
13
14    for(i = 0; i < size; i++)
15        sum = sum + arr[i];
16
17    printf("Sum of the array = %d\n",sum);
18
19    return 0;
20 }
```

```
1 #include <stdio.h>
2 #define SIZE 3
3
4 int main()
5 {
6     int A[SIZE][SIZE];
7     int row, col, sum = 0;
8
9     printf("Enter elements in matrix of size %dx%d: \n", SIZE, SIZE);
10    for(row=0; row<SIZE; row++)
11    {
12        for(col=0; col<SIZE; col++)
13        {
14            scanf("%d", &A[row][col]);
15        }
16    }
17
18    for(row=0; row<SIZE; row++)
19    {
20        sum = sum + A[row][row];
21    }
22
23    printf("\nSum of main diagonal elements = %d", sum);
24
25    return 0;
26 }
```

```
1 #include <stdio.h>
2 int main(){
3     int inputArray[100], elementCount, counter, num;
4
5     printf("Enter Number of Elements in Array\n");
6     scanf("%d", &elementCount);
7     printf("Enter %d numbers \n", elementCount);
8
9     for(counter = 0; counter < elementCount; counter++){
10         scanf("%d", &inputArray[counter]);
11     }
12
13     printf("Enter a number to serach in Array\n");
14     scanf("%d", &num);
15
16     for(counter = 0; counter < elementCount; counter++){
17         if(inputArray[counter] == num){
18             printf("Number %d found at index %d\n", num, counter);
19             break;
20         }
21     }
22
23     if(counter == elementCount){
24         printf("Number %d Not Present in Input Array\n", num);
25     }
26
27     return 0;
28 }
```

```
1
2 #include <stdio.h>
3 #define MAX_SIZE 100
4
5 int main()
6 {
7     int arr[MAX_SIZE];
8     int i, size, pos;
9
10    printf("Enter size of the array : ");
11    scanf("%d", &size);
12    printf("Enter elements in array : ");
13    for(i=0; i<size; i++)
14    {
15        scanf("%d", &arr[i]);
16    }
17
18    printf("Enter the element position to delete : ");
19    scanf("%d", &pos);
20
21
22    if(pos < 0 || pos > size)
23    {
24        printf("Invalid position! Please enter position between 1 to %d", size);
25    }
26    else
27    {
28        for(i=pos-1; i<size-1; i++)
29        {
30            arr[i] = arr[i + 1];
31        }
32
33        size--;
34
35        printf("\nElements of array after delete are : ");
36        for(i=0; i<size; i++)
37        {
38            printf("%d\t", arr[i]);
39        }
40    }
41
42    return 0;
43 }
```

```
1 #include <stdio.h>
2 long factorial(int);
3 int main()
4 {
5     int i, n, c;
6     printf("Enter the number of rows you wish to see in pascal triangle\n");
7     scanf("%d", &n);
8     for (i = 0; i < n; i++) {
9         for (c = 0; c <= (n - i - 2); c++) printf(" ");
10        for (c = 0; c <= i; c++) printf("%ld ", factorial(i) / (factorial(c) * factorial(i - c)));
11        printf("\n");
12    }
13    return 0;
14 }
15 long factorial(int n) {
16     int c;
17     long result = 1;
18     for (c = 1; c <= n; c++) result = result * c;
19     return result;
20 }
```

```
1 #include <stdio.h>
2
3 int main()
4 {
5     char ch;
6
7     printf("Enter any alphabet: ");
8     scanf("%c", &ch);
9
10    switch(ch)
11    {
12        case 'a':
13            printf("Vowel");
14            break;
15        case 'e':
16            printf("Vowel");
17            break;
18        case 'i':
19            printf("Vowel");
20            break;
21        case 'o':
22            printf("Vowel");
23            break;
24        case 'u':
25            printf("Vowel");
26            break;
27        case 'A':
28            printf("Vowel");
29            break;
30        case 'E':
31            printf("Vowel");
32            break;
33        case 'I':
34            printf("Vowel");
35            break;
36        case 'O':
37            printf("Vowel");
38            break;
39        case 'U':
40            printf("Vowel");
41            break;
42        default:
43            printf("Consonant");
44    }
45
46    return 0;
47 }
```

```
1 #include <stdio.h>
2
3 int main()
4 {
5     char ch;
6     printf("Enter any character:
7 ");
8     scanf("%c", &ch);
9
10    if((ch >= 'a' && ch <= 'z') ||
11        (ch >= 'A' && ch <= 'Z'))
12    {
13        printf("'%c' is alphabet.", ch);
14    }
15    else if(ch >= '0' && ch <= '9')
16    {
17        printf("'%c' is digit.", ch);
18    }
19    else
20    {
21        printf("'%c' is special
22 character.", ch);
23    }
24
25    return 0;
26 }
```

```
1 #include <stdio.h>
2 #include <conio.h>
3 void main()
4 {
5     int num, i, sum = 0;
6     printf(" Enter a positive
number: ");
7     scanf("%d", &num);
8     for (i = 1; i <= num; i++)
9     {
10         sum = sum + i;
11         printf("%d\n", i);
12     }
13     printf("Sum of the first %d
number is: %d", num, sum);
14 }
```

```
1 #include<stdio.h>
2 void main() {
3     float a,b,c,d,e;
4     printf("Enter the marks of all
5         five subjects\n");
6     scanf("%f%f%f%f%f" ,&a ,&b ,&c ,&d ,&e);
7     float total = a+b+c+d+e;
8     printf("Total of the Numbers is
9         %.2f\n",total);
10    float avg = total/5;
11    printf("Average of the marks is
12        %.2f\n",avg);
13    float percentage = avg;
14    printf("Percentage of the marks
15        is %.2f\n",percentage);
16 }
```

```
1 #include <stdio.h>
2 int main()
3 {
4     int i, n, sum=0;
5     printf("Enter any number: ");
6     scanf("%d", &n);
7     for(i=2; i<=n; i+=2)
8     {
9         sum += i;
10        printf("%d\n", i);
11    }
12    printf("Sum of all even numbers
13       from 1 to %d: %d", n, sum);
14 }
```

```
1 #include<stdio.h>
2 void main() {
3     int a,b;
4     int c,d,e,f;
5     int g;
6     printf("Enter the two numbers -
7 \n");
8     scanf("%d%d",&a,&b);
9     c = a+b;
10    d = a-b;
11    e = a*b;
12    f = a/b;
13    g = a%b;
14    printf("Addition of both
15 numbers is - %d\n",c);
16    printf("Substraction of both
17 numbers is - %d\n",d);
18    printf("Multiplication of both
19 numbers is - %d\n",e);
20    printf("Division of both
21 numbers is - %d\n",f);
22    printf("Reminder after deviding
23 of both numbers is - %d\n",g);
24 }
```

```
1 #include <stdio.h>
2 int main() {
3     int n, i;
4     unsigned long long fact = 1;
5     printf("Enter an integer: ");
6     scanf("%d", &n);
7
8     if (n < 0)
9         printf("Error! Factorial of
a negative number doesn't exist.");
10    else {
11        for (i = 1; i <= n; ++i) {
12            fact *= i;
13        }
14        printf("Factorial of %d =
%llu", n, fact);
15    }
16
17    return 0;
18 }
```

```
1 #include<stdio.h>
2 void main()
3 {
4     int a, b, c, big ;
5
6     printf("Enter three numbers :
") ;
7     scanf("%d %d %d", &a, &b, &c) ;
8     big = a > b ? (a > c ? a : c) :
(b > c ? b : c) ;
9     printf("\nThe biggest number is
: %d", big) ;
10 }
```

```
1 #include <stdio.h>
2 #include <math.h>
3
4
5 double getDiameter(double radius);
6 double getCircumference(double radius);
7 double getArea(double radius);
8
9
10 int main()
11 {
12     float radius, dia, circ, area;
13
14     printf("Enter radius of circle: ");
15     scanf("%f", &radius);
16
17     dia = getDiameter(radius);
18     circ = getCircumference(radius);
19     area = getArea(radius);
20
21     printf("Diameter of the circle = %.2f units\n", dia);
22     printf("Circumference of the circle = %.2f units\n", circ);
23     printf("Area of the circle = %.2f sq. units", area);
24
25     return 0;
26 }
27 double getDiameter(double radius)
28 {
29     return (2 * radius);
30 }
31
32
33 double getCircumference(double radius)
34 {
35     return (2 * M_PI * radius);
36 }
37
38
39 double getArea(double radius)
40 {
41     return (M_PI * radius * radius);
42 }
```

```
1 #include <stdio.h>
2 #include <math.h>
3
4 int isPrime(int num);
5 int isArmstrong(int num);
6 int isPerfect(int num);
7
8
9 int main()
10 {
11     int num;
12
13     printf("Enter any number: ");
14     scanf("%d", &num);
15
16     if(isPrime(num))
17     {
18         printf("%d is Prime number.\n", num);
19     }
20     else
21     {
22         printf("%d is not Prime number.\n", num);
23     }
24
25     if(isArmstrong(num))
26     {
27         printf("%d is Armstrong number.\n", num);
28     }
29     else
30     {
31         printf("%d is not Armstrong number.\n", num);
32     }
33
34     if(isPerfect(num))
35     {
36         printf("%d is Perfect number.\n", num);
37     }
38     else
39     {
40         printf("%d is not Perfect number.\n", num);
41     }
42
43     return 0;
44 }
45
46
47
48 int isPrime(int num)
49 {
50     int i;
51
52     for(i=2; i<=num/2; i++)
53     {
54         if(num%i == 0)
55         {
56             return 0;
57         }
58     }
59
60     return 1;
61 }
62 int isArmstrong(int num)
63 {
64     int lastDigit, sum, originalNum, digits;
65     sum = 0;
66
67     originalNum = num;
68
69     digits = (int) log10(num) + 1;
70
71     while(num > 0)
72     {
73         lastDigit = num % 10;
74
75         sum = sum + round(pow(lastDigit, digits));
76
77         num = num / 10;
78     }
79
80     return (originalNum == sum);
81 }
82
83 int isPerfect(int num)
84 {
85     int i, sum, n;
86     sum = 0;
87     n = num;
88
89     for(i=1; i<n; i++)
90     {
91         if(n%i == 0)
92         {
93             sum += i;
94         }
95     }
96
97     return (num == sum);
98 }
```

```
1 #include <stdio.h>
2 int main (void)
3 {
4     int a[10][10];
5     int i = 0, j = 0, row = 0, col = 0;
6
7     printf ("Enter the order of the matrix (mxn):\n");
8     printf ("where m = number of rows; and\n");
9     printf ("      n = number of columns\n");
10    scanf ("%d %d", &row, &col);
11
12    int flag = 0;
13
14    printf ("Enter the elements of the matrix\n");
15    for (i = 0; i < row; i++)
16    {
17        for (j = 0; j < col; j++)
18        {
19            scanf ("%d", &a[i][j]);
20        }
21    }
22
23    for (i = 0; i < row; i++)
24    {
25        for (j = 0; j < col; j++)
26        {
27            if (i == j && a[i][j] != 1)
28            {
29                flag = -1;
30                break;
31            }
32            else if (i != j && a[i][j] != 0)
33            {
34                flag = -1;
35                break;
36            }
37        }
38    }
39
40    if (flag == 0)
41    {
42        printf ("It is a IDENTITY MATRIX\n");
43    }
44    else
45    {
46        printf ("It is NOT an identity matrix\n");
47    }
48
49    return 0;
50 }
```

```
1 #include <stdio.h>
2 void swap(int , int);
3 int main()
4 {
5     int a = 10;
6     int b = 20;
7     printf("Before swapping the
values in main a = %d, b =
%d\n",a,b);
8     swap(a,b);
9     printf("After swapping values
in main a = %d, b = %d\n",a,b);
10 }
11 void swap (int a, int b)
12 {
13     int temp;
14     temp = a;
15     a=b;
16     b=temp;
17     printf("After swapping values
in function a = %d, b = %d\n",a,b);
18 }
```

```
26     if (flag == 1)
27         printf ("%s is a palindrome
28             \n", string);
29     else
30         printf("%s is not a
31             palindrome \n", string);
32 }
```

```
1 #include <stdio.h>
2 #include <string.h>
3
4 int main()
5 {
6     char s[1000];
7     int i,j,k,count=0,n;
8
9     printf("Enter the string : ");
10    gets(s);
11
12    for(j=0;s[j];j++);
13        n=j;
14
15    printf(" frequency count
character in string:\n");
16
17    for(i=0;i<n;i++)
18    {
19        count=1;
20        if(s[i])
21        {
22
23            for(j=i+1;j<n;j++)
24            {
25
26                if(s[i]==s[j])
27                {
28                    count++;
29                    s[j]='\0';
30                }
31            }
32            printf(" '%c' = %d
\n",s[i],count);
33        }
```

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int num;
6
7     printf("Enter any number: ");
8     scanf("%d", &num);
9
10    switch (num > 0)
11    {
12        case 1:
13            printf("%d is
positive.", num);
14            break;
15
16        case 0:
17            switch (num < 0)
18            {
19                case 1:
20                    printf("%d is
negative.", num);
21                    break;
22                case 0:
23                    printf("%d is
zero.", num);
24                    break;
25            }
26            break;
27    }
28
29    return 0;
30 }
```

```
1 #include <stdio.h>
2 int main() {
3     int a[10][10], transpose[10][10],
4         r, c;
5     printf("Enter rows and columns:
");
6
7     printf("\nEnter matrix
elements:\n");
8     for (int i = 0; i < r; ++i)
9         for (int j = 0; j < c; ++j) {
10            printf("Enter element a%d%d: ",
11                  i + 1, j + 1);
12            scanf("%d", &a[i][j]);
13        }
14
15        printf("\nEnterd matrix: \n");
16        for (int i = 0; i < r; ++i)
17            for (int j = 0; j < c; ++j) {
18                printf("%d ", a[i][j]);
19                if (j == c - 1)
20                    printf("\n");
21
22        for (int i = 0; i < r; ++i)
23            for (int j = 0; j < c; ++j) {
24                transpose[j][i] = a[i][j];
25            }
26
27 }
```

```
1 #include <stdio.h>
2 int main()
3 {
4     int first, second, *p, *q, sum;
5
6     printf("Enter two integers to
7         add\n");
8
9     p = &first;
10    q = &second;
11
12    sum = *p + *q;
13
14    printf("Sum of the numbers =
15        %d\n", sum);
16
17 }
```

```
1 #include <stdio.h>
2 int main()
3 {
4     int days, years, weeks;
5     printf("Enter the number of
6 Days");
7     scanf("%d", &days);
8     years = days/365;
9     weeks = (days % 365)/7;
10    days = days- ((years*365) +
11 (weeks*7));
12
13    printf("Years: %d\n", years);
14    printf("Weeks: %d\n", weeks);
15    printf("Days: %d \n", days);
16 }
```

```
1 #include<stdio.h>
2 #include<math.h>
3 void main() {
4     float a;
5     printf("Enter the number\n");
6     scanf("%f",&a);
7     float power = pow(a,2);
8     printf("Squire of the number is
%.3f\n",power);
9     float squireroot = pow(a,0.5);
10    printf("Squireroot of the
number is %.3f\n",squireroot);
11 }
```

```
1 #include<stdio.h>
2 void main() {
3     int a = 5;
4     int b = 5;
5
6     for(int i=1; i<=a; i++){
7         for(int j=1; j<=b; j++) {
8             if(i==1 || j==1 || i==a
9                 || j == b) {
10                 printf("*");
11             } else {
12                 }
13             }
14             printf("\n");
15         }
16     }
```

```
1 #include<stdio.h>
2 void main() {
3     int a =5;
4     int b =5;
5     for (int k = 1; k<=b; k++) {
6         for(int i=a-k; i>=1; i--) {
7             printf(" ");
8         }
9         for(int j=1; j<=a; j++) {
10            printf("*");
11        }
12        printf("\n");
13    }
14}
15 }
```

```
1 #include<stdio.h>
2 void main() {
3     int a = 5;
4     int b = 5;
5
6     for(int i=1; i<=a; i++){
7         for(int j=1; j<=b; j++) {
8             printf("*");
9         }
10        printf("\n");
11    }
12 }
```

```
1 #include<stdio.h>
2 void main() {
3     int a =5;
4     int b =5;
5     for(int i=1; i<=b; i++) {
6         for(int j1=a-i; j1>=1; j1-
7             ) {
8             printf(" ");
9         }
10        if (i==1 || i == b ||
11            j2 == 1 || j2 == a)
12        {
13            printf("*");
14        }
15        printf(" ");
16    }
17 }
18 printf("\n");
19 }
20 }
```

```
1 #include<stdio.h>
2 void main() {
3     int a = 5;
4     for(int i=1; i<=a; i++) {
5         for(int j=1; j<=i; j++) {
6             if (j==1 || j==i || i
== a)
7                 {
8                     printf("*");
9                 } else {
10                     printf(" ");
11                 }
12             }
13         }
14         printf("\n");
15     }
16 }
```

```
1 #include <stdio.h>
2
3 #define MAX_SIZE 100
4
5 void printArray(int arr[], int size);
6
7
8 int main()
9 {
10     int source_arr[MAX_SIZE], dest_arr[MAX_SIZE];
11     int size, i;
12
13     int *source_ptr = source_arr;
14     int *dest_ptr = dest_arr;
15
16     int *end_ptr;
17
18     printf("Enter size of array: ");
19     scanf("%d", &size);
20     printf("Enter elements in array: ");
21     for (i = 0; i < size; i++)
22     {
23         scanf("%d", (source_ptr + i));
24     }
25     end_ptr = &source_arr[size - 1];
26
27
28     printf("\nSource array before copying: ");
29     printArray(source_arr, size);
30
31     printf("\nDestination array before copying: ");
32     printArray(dest_arr, size);
33
34
35
36     while(source_ptr <= end_ptr)
37     {
38         *dest_ptr = *source_ptr;
39
40         source_ptr++;
41         dest_ptr++;
42     }
43
44
45     printf("\n\nSource array after copying: ");
46     printArray(source_arr, size);
47
48     printf("\nDestination array after copying: ");
49     printArray(dest_arr, size);
50
51
52     return 0;
53 }
54
55 void printArray(int *arr, int size)
56 {
57     int i;
58
59     for (i = 0; i < size; i++)
60     {
61         printf("%d, ", *(arr + i));
62     }
63 }
```

```
1 #include<stdio.h>
2 int main(){
3     int side1, side2, side3;
4     printf("Enter sides of
5         triangle:");
6     scanf("%d%d%d",&side1,&side2,&side3
7 );
8     if(side1 == side2 && side2 ==
9         side3)
10         printf("The Given Triangle is
11             equilateral");
12     else if(side1 == side2 || side2
13         == side3 || side3 == side1)
14         printf("The given Triangle is
15             isosceles");
16     else
17         printf("The given Triangle is
18             scalene");
19     return 0;
20 }
```

```
1 #include <stdio.h>
2
3 int main()
4 {
5     int unit;
6     float amt, total_amt,
7         sur_charge;
8
9     printf("Enter total units
10    consumed: ");
11    scanf("%d", &unit);
12
13    if(unit <= 50)
14    {
15        amt = unit * 0.50;
16    }
17    else if(unit <= 150)
18    {
19        amt = 25 + ((unit-50) *
20            0.75);
21    }
22    else if(unit <= 250)
23    {
24        amt = 100 + ((unit-150) *
25            1.20);
26    }
27
28    sur_charge = amt * 0.20;
29    total_amt = amt + sur_charge;
30
31    printf("Electricity Bill = Rs.
```

```
1 #include <stdio.h>
2 int main() {
3     int n, i;
4     printf("Enter an integer: ");
5     scanf("%d", &n);
6     for (i = 1; i <= 10; ++i) {
7         printf("%d * %d = %d \n", n, i,
8                n * i);
9     }
10 }
```

```
1 #include<stdio.h>
2 void main() {
3     int a,b;
4     printf("Ente the first
5         number\n");
6     scanf("%d",&a);
7     printf("Ente the second
8         number\n");
9     scanf("%d",&b);
10
11    // using third variable
12    int c;
13    c = a;
14    a = b;
15    b = c;
16
17    printf("Values after swaping
18        are %d and %d\n\n",a,b);
19
20    printf("Ente the first
21        number\n");
22    scanf("%d",&a);
23    printf("Ente the second
24        number\n");
25    scanf("%d",&b);
26    // without using third variable
27
28    a = a+b;
29    b = a-b;
30    a = a-b;
31
32    printf("Values after swaping
33        are %d and %d",a,b);
34
35 }
```