INDEX

1.WAP to find greatest of three number using conditional operator.

```
#include<stdio.h>
void main()
{
int i,j,k;
printf("Enter three no.\n");
scanf("%d%d%d",&i,&j,&k);
int re=(i>j)?((i>k)?i:k):((j>k)?j:k);
printf("greatest number=%d",re);
}
```

2.WAP to display first n natural numbers.

```
#include<stdio.h>
void main()
{
int i,no;
printf("Enter the value of n");
scanf("%d",&no);
for(i=1;i<=no;i++)
{
printf("%d\n",i); } }
```

3.WAP to find the factorial of a given number.

```
#include<stdio.h>
void main()
{      int i,n,fact=1;
       printf("Enter the no");
       scanf("%d",&n);
       for(i=1;i<=n;i++)
       {
        fact=fact*i;
        }printf("Factorial of %d is %d",no,fact);
}
```

4.WAP to implement Fibonacci series upto n terms.

```
#include<stdio.h>
void main()
{
int i,no,a=0,b=1,c;
printf("How many elements you want to display");
scanf("%d",&no);
printf("%d\n%d\n",a,b);
for(i=1;i<=n-2;i++)
{
c=a+b;
printf("%d",c);
a=b;
b=c;
}
}
```

---

5. WAP to check whether the given number is prime or not.

```
#include<stdio.h>
void main()
{
        int i=2,n;
      printf("Enter a number:");
        scanf("%d",&n);
        while(n%i!=0)
        {
         i++;
        }
        if(n==i)
        {
                printf("Prime Number");
        }
        else {
                printf("Not a prime number");
        } }
```

6. WAP to print prime numbers between 1 to 100.

```
#include<stdio.h>
void main()
{
int no=2;
int i;
while(no<=100)
  {
for(i=2;i<no;i++)
  {
if(no%i==0)
    {
     break;
     }
 }
if(i==no)
printf("%d\n",no);
no++;
  }
}
```

7.WAP to calculate the value of series:1+1/2+1/3.....+1/n

```
#include <stdio.h>
void main()
{
   int count,n;
   float sum=0.0;
   printf("Enter the value of n.\n");
   scanf("%d",&n);
   for(count=1;count<=n;count++)  //for loop terminates if count>n
   {
       sum=sum+1.0/count;
   }
   printf("\nSum = %f",sum);
  }
```

8.WAP to calculate the value of series:sinx=x-x^3/3!+x^5/5!.....x^n/n!

```
#include<stdio.h>
#include<math.h>
void main()
{
int i,n,fact=1,sign=-1;
float x,num,sum,term;
printf("Enter the angle in degrees and value of n");
scanf("%f%d",&x,&n);
x=x*3.14/180;
term=x;
sum=term;
for(i=3;i<=n;i=i+2)
{
fact=fact*i*(i-1);
num=pow(x,i);
term=num/fact;
sum=sum+sign*term;
sign=sign*(-1);
}
printf("The value of the series is:%f",sum);
}
```

9.WAP to check if the entered year is leap year or not.

```
#include<stdio.h>
void main()
{
int y;
printf("Enter year\n");
scanf("%d",&y);
if(y%4==0)
printf("%d is leap year",y);
else
printf("%d is not leap year",y);
}
```

10.WAP to develop menu based calculator for performing basic maths operations.

```
# include <stdio.h>
void main()
{
   char o;
   float num1,num2;
   printf("Select an operator either + or - or * or / \n");
   scanf("%c",&o);
   printf("Enter two operands: ");
   scanf("%f%f",&num1,&num2);
   switch(o) {
      case '+':
         printf("%f + %f = %f",num1, num2, num1+num2);
         break;
      case '-':
         printf("\n%.1f - %.1f = %.1f",num1, num2, num1-num2);
        break;
      case '*':
         printf("\n%.1f * %.1f = %.1f",num1, num2, num1*num2);
         break;
      case '/':
         printf("\n%.1f / %.1f = %.1f",num1, num2, num1/num2);
    break;
      default:
         /* If operator is other than +, -, * or /, error message is shown */
         printf("\nError! operator is not correct");
        break;
   }

}
```

11.WAP to count the number of digits in a user entered number.

```
#include<stdio.h>
void main()
{
        int num,count=0;
        printf("Enter number :");
        scanf("%d",&num);
        while(num!=0)
      {
         count++;
       num=num/10;
       }

}
```

12.WAP to find whether a given number is Armstrong or not.

```
#include<stdio.h>
void main()
{
        int num, temp, sum = 0, rem;
        printf("\nEnter number for checking Armstrong : ");
        scanf("%d", &num);
         temp = num;
         while (num != 0)
         {
                rem = num % 10;
                sum = sum + (rem * rem * rem);
                num = num / 10;
        }
        if (temp == sum)
                printf("%d is Amstrong Number", temp);
        else
                printf("%d is Not Amstrong Number", temp);

}
```

13.WAP to check whether a given number is palindrome or not.

```
#include<stdio.h>
void main()
{
        int num, rem, rev = 0;
        printf("\nEnter any no to be reversed : ");
        scanf("%d", &num);
        while (num >= 1)
        {
                rem = num % 10;
                rev = rev * 10 + rem;
                num = num / 10;
        }
        printf("\nReversed Number : %d", rev);

}
```

14.WAP to display Armstrong numbers between 1-1000

```
#include<stdio.h>
void main()
{
int no, temp, rem, sum;
printf("Armstrong numbers between 1 and 1000 are:\n");
for(no=1; no<=1000; no++)
{
temp=no;
sum=0;
while(temp>0)
{
rem=temp%10;
sum=sum+(rem*rem*rem);
temp=temp/10;
}
if(no==sum)
printf("%d\n", no); } }
```

15.WAP to check entered number is even or odd.

```
#include<stdio.h>
void main()
{
int no;
printf("Enter number\n");
scanf("%d",&no);
if(no%2==0)
print("%d is even number",no);
else
printf("%d is odd number",no);
}
```

16.Demonstration of goto statement

```
#include<stdio.h>
void main()
{
        int n,total=0;
    again:
        printf("Enter a number:");
        scanf("%d",&n);
        total=total+n;
        if(total<100)
        goto again;
        printf("Total=%d",total);
}
```

17.Demonstration of break statement

```
#include<stdio.h>
void main()
{
        int n,total=0,i;
        for(i=1;i<=10;i++)
        {
                printf("Enter a number:");
                scanf("%d",&n);
                if(n>99)
                break;
                total=total+n;
        }
        printf("Total=%d",total);
}
```

18.Demonstration of continue statement

```
#include<stdio.h>
void main()
{
        int n,total=0,i;
        for(i=1;i<=5;i++)
        {
                printf("Enter a number:");
                scanf("%d",&n);
                if(n>99)
                {
                        printf("Number is greater than 99\n");
                        i--;
                        continue;
                }
                total=total+n; }
        printf("Total=%d",total); }
```

19.WAP to find LCM and GCD of two numbers.

```
#include<stdio.h>
void main() {
int n1,n2,x,y,lcm,gcd;
printf("Enter 2");
scanf("%d%d",&n1,&n2);
x=n1;
y=n2;
while(n1!=n2)
{
if(n1>n2)
{
n1=n1-n2;
}
else
{
n2=n2-n1;
} }
printf("GCD=%d\n",n1);
gcd=n1;
lcm=(x*y)/gcd;
printf("LCM=%d",lcm);
 }
```

20.WAP to check whether a given number is divisible by 5 or not.

```
#include<stdio.h>
void main()
{
int no;
printf("Enter number\n");
scanf("%d",&no);
if(no%5==0)
printf("%d is divisible by 5",no)
}
```

21.WAP to display user entered number into words.

```
#include<stdio.h>
void main()
{
int rev=0,no,rem,rem1;
printf("Enter number\n");
scanf("%d",&no);
while(no!=0)
{
 rem=no%10;
 rev=rev*10+rem;
 no=no/10;
}

while(rev!=0)
{
rem=rev%10;
rev=rev/10;
switch(rem)
{
case 1:printf("One ");
break;
case 2:printf("two ");
break;
case 3:printf("three ");
break;
case 4:printf("four ");
break;
}
}
}
```

22.

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

```
#include<stdio.h>
void main()
{
int i,j;
for(i=1;i<=3;i++)
{
for(j=1;j<=3-i;j++)
{
printf(" ");
}
for(j=1;j<=i;j++)
{
printf("* ");
}
printf("\n");
}
for(i=3-1;i>=1;i--)     //for downward pyramid
{
for(j=1;j<=3-i;j++)
{
printf(" ");
}
for(j=i;j>=1;j--)
{
printf("* ");
}
printf("\n"); } }
```

23.

```
   1
  121
 12321
1234321
```

```
#include<stdio.h>
void main()
{
int i,j;
for(i=1;i<=4;i++)
{
for(j=1;j<=4-i;j++)
{
printf(" ");
}
for(j=1;j<=i;j++)
{
printf("%d",j);
}
for(j=i-1;j>=1;j--)
{
printf("%d",j);
}
printf("\n");
}
}
```

24.

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

```
#include<stdio.h>
void main()
{int no,i,j;
printf("Enter no of rows\n");
scanf("%d",&no);
for(i=1;i<=no;i++)
{
for(j=1;j<=i;j++)
{printf("*");
}
printf("\n");}}
```

25.

```
1
12
123
1234
```

```
#include<stdio.h>
void main()
{int no,i,j;
printf("Enter no of rows\n");
scanf("%d",&no);
for(i=1;i<=no;i++)
{
for(j=1;j<=i;j++)
{printf("%d",j);
}
printf("\n");}}
```

26.(Pascal traingle)

```
          1
        1  1
      1   2   1
    1   3   3   1
```

```
#include<stdio.h>
int facto(int no)
{
int i,fact=1;
for(i=1;i<=no;i++)
{
fact=fact*i;
}
return fact;
}

void main()
{
int no,fa,i,j;
printf("Enter no\n");
scanf("%d",&no);
for(i=0;i<no;i++)
{
for(j=0;j<no-i;j++)
{
printf(" ");
}
for(j=0;j<=i;j++)
{
fa=facto(i)/(facto(j)*facto(i-j));
printf("%d ",fa);
}
printf("\n");
}
}
```

27.

```
    A
   ABA
  ABCBA
 ABCDCBA
```

```
#include<stdio.h>
void main()
{
        int i,j,n;
        printf("Enter the number of lines:");
        scanf("%d",&n);
        for(i=1;i<=n;i++)
        {
                for(j=1;j<=n-i;j++)
                {
                        printf(" ");
                }
                for(j=1;j<=i;j++)
                {
                        printf("%c",(char)(j+64));
                }
                for(j=i-1;j>=1;j--)
                {
                        printf("%c",(char)(j+64));
                }
                printf("\n");
        }

}
```

28.

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

```
#include<stdio.h>
void main()
{
  int i,j,n;
  printf("Enter the number of * in the middle line:");
  scanf("%d",&n);
  for(i=1;i<=n;i++)
  {
   for(j=1;j<=n-i;j++)
   {
    printf(" ");
   }
  for(j=1;j<=i;j++)
  {
   printf("*");
  }
  printf("\n");
  }
  for(i=n-1;i>=1;i--)      //for downward pattern
  {
   for(j=1;j<=n-i;j++)
  {
  printf(" ");
  }
  for(j=1;j<=i;j++)
  {
   printf("*");
   }
   printf("\n");
  }
  }
```

29.

```
A
B C
D E F
G H I J
K L M N
```

```
#include<stdio.h>

void main()
{
 int i,j,n,k;
 printf("Enter the number of lines:");
 scanf("%d",&n);
  for(i=1,k=1;i<=n;i++)
 {
  for(j=1;j<=i;j++)
 {
  printf("%c ",64+k++);
   }
   printf("\n");
    }

}
```

Function

28. WAP to check the given number is armstrong or not using function.

```
#include<stdio.h>
int arm(int no)
{
int rem,sum=0;
while(no!=0)
{
rem=no%10;
sum=sum+rem*rem*rem;
no=no/10;
}
return sum;
}
void main()
{
int no,sum;
printf("Enter the number");
scanf("%d",&no);
sum=arm(no);
if(no==sum)
{
printf("%d is armstrong",no);
}}
```

29.WAP to find factorial of a given number using recursion.

```
#include<stdio.h>
int facto(int no)
{
if(no==1)
return 1;
else
return (no*facto(no-1));
}
```

```
void main()
{
int num,res;
printf("Enter no\n");
scanf("%d",&num);
res=facto(num);
printf("facto=%d",res);
}
```

30.WAP to generate n terms of Fibonaccii series using recursion.

```
#include<stdio.h>
int fibo(int no)
{
if(no==0)
return 0;
else
if(no==1)
return 1;
else
return (fibo(no-1)+fibo(no-2));
}
void main()
{
int num,i,fib;
printf("Enter no\n");
scanf("%d",&num);
for(i=0;i<num;i++)
{
fib=fibo(i);
printf("%d\n",fib);
}
}
```

31.WAP to find the value of X^y taking x and y from user.

```
#include<stdio.h>
int pwr(int base,int index)
{
if(index==0)
return 1;
else
if(index==1)
return base;
else
return (base*pwr(base,index-1));
}
void main()
{
int bs,in,rslt;
printf("Enter base and index");
scanf("%d%d",&bs,&in);
rslt=pwr(bs,in);
printf("result=%d",rslt);
}
```

32.WAP to find the value of nCr using function taking the values of n and r from the user.

```
#include<stdio.h>
int fact (int no)
{       int i,ans;
        for(i=1,ans=1;i<=no;i++)
        {  ans=ans*i;  }
        return ans;
}
void main()
{       int n,r,ncr;
        printf("Enter the values of n and r:");
        scanf("%d %d",&n,&r);
        ncr=fact(n)/(fact(r)*fact(n-r));
        printf("nCr=%d",ncr);          }
```

ARRAY

33.WAP to take n integer from user, store them in an array and display the sum and average .

```
#include<stdio.h>
void main()   {
        int n,i,a[100],sum=0;
        float avg;
        printf("Enter the number of elements:");
        scanf("%d",&n);
        for(i=0;i<=n-1;i++)
        {       printf("Enter a value:");
                scanf("%d",&a[i]);
        }
        for(i=0;i<=n-1;i++)
        {       sum=sum+a[i];     }
        avg=sum;
        avg=avg/n;
        printf("The sum of the numbers=%d\n Average of the numbers= %f",sum,avg); }
```

34.WAP to count the even and odd numbers in an array.

```
#include<stdio.h>
void main()
{       int n,i,a[100],even=0;
        printf("Enter the number of elements:");
        scanf("%d",&n);
        printf("Enter the elements of array\n");
       for(i=0;i<=n-1;i++)
        {
        scanf("%d",&a[i]);
        }
        for(i=0;i<=n-1;i++)
        {
                if (a[i]%2==0)
                even++;
        }
        printf("The count of even numbers is %d and that of odd numbers is %d",even,(n-even)); }
```

35. WAP to find the largest number in an array.

```
#include<stdio.h>
void main( )
{
        int n,i,a[100],large;
        printf("Enter the number of elements:");
        scanf("%d",&n);
        for(i=0;i<=n-1;i++)
        {
                printf("Enter a value:");
                scanf("%d",&a[i]);
        }
        large=a[0];
        for(i=1;i<=n-1;i++)
        {
                if(large<a[i])
                large=a[i];
        }
        printf("The largest number is %d",large);
}
```

36.WAP to find and display the reverse of an array into the same array.

```
#include<stdio.h>
void main()
{
        int n,i,a[100],i,temp;
        printf("Enter the number of elements:");
        scanf("%d",&n);
       printf("Enter Elements of array:");
        for(i=0;i<n;i++)
        {
                scanf("%d",&a[i]);
        }
```

```
        for(i=0;i<=(n-1)/2;i++)
        {
                temp=a[n-i-1];
                a[n-i-1]=a[i];
                a[i]=temp;
        }
        printf("The reverse of the array is:\n");
        for(i=0;i<=n-1;i++)
        {
                printf("%d\n",a[i]);
        }
}
```

37.WAP to find an element in an array and display the index of it

OR

WAP to implement sequential search.

```
#include<stdio.h>
void main()
{
        int n,i,a[100],x,index;
        printf("Enter the number of elements:");
        scanf("%d",&n);
        printf("Enter Elements of array:");
        for(i=0;i<=n-1;i++)
        {
                scanf("%d",&a[i]);
        }
        printf("Enter the element to be searched:");
        scanf("%d",&x);
        for(i=0 ; i < n ; i++)
        {
                if(x==a[i])
                break;
        }
```

```
        if(i==n)                    //searched till last element of array but number not found
         printf("Not Found");
         else
         printf("The element %d is found in the index %d",x,i);
}
```

38.WAP to sort the array in ascending order OR WAP to implement Bubble sort.

```
#include<stdio.h>
void main()
{
int a[50],temp;
int i,j,no;
printf("Enter number of elements\n");
scanf("%d",&no);
printf("Enter the elements of array\n");
for(i=0;i<no;i++)
{
scanf("%d",&a[i]);
}
for(i=0;i<no-1;i++)
{
for(j=0;j<no-1;j++)
{
if(a[j]>a[j+1])
{
temp=a[j];
a[j]=a[j+1];
a[j+1]=temp;
}
}
}
printf("Sorted array is\n");
for(i=0;i<no;i++)
{
printf("%d\t",a[i]); } }
```

39.WAP to find the sum of element of array by passing array to function.

```
#include<stdio.h>
int sum(int ar[],int no)
{
int i,sum=0;
for(i=0;i<no;i++)
{
sum+=ar[i];
}
return sum;
}
void main()
{
int a[100],no,i,ans;
printf("Enter how many elements u want\n");
scanf("%i",&no);
printf("Enter elements of array\n");
for(i=0;i<no;i++)
{
scanf("%d",&a[i]);
}
ans=sum(a,no);                    //passing array and number of element to function
printf("Sum=%d",ans);
}
```

40.WAP to find transpose of the given matrix (with using another matrix)

```
#include <stdio.h>
void main()
{
int i,j,no,ar[10][10],b[10][10];
printf("ENter size of array");
scanf("%d",&no);
printf("Enter elements\n");
```

```
for(i=0;i<no;i++)
{
for(j=0;j<no;j++)
{
scanf("%d",&ar[i][j]);
}
}
printf("******Original matrix*******\n");
for(i=0;i<no;i++)
{
for(j=0;j<no;j++)
{
printf("%d\t",ar[i][j]);
}
printf("\n");
}
printf("********************\n");
printf("Transpose matrix is\n");

for(i=0;i<no;i++)
{
for(j=0;j<no;j++)
{
b[j][i]=ar[i][j];
}
}
for(i=0;i<no;i++)
{
for(j=0;j<no;j++)
{
printf("%d\t",b[i][j]);
}
printf("\n");
}
}
```

41.WAP to find transpose of the given matrix (without using another matrix)

```
#include "stdio.h"
void main()
{
int i,j,no,ar[10][10],temp;
printf("ENter size of array");
scanf("%d",&no);
printf("Enter elements\n");
for(i=0;i<no;i++)
{
for(j=0;j<no;j++)
{
scanf("%d",&ar[i][j]);
}
}
printf("******Original matrix*******\n");
for(i=0;i<no;i++)
{
for(j=0;j<no;j++)
{
printf("%d\t",ar[i][j]);
}
printf("\n");
}
printf("********************\n");
printf("Transpose matrix is\n");
for(i=0;i<no;i++)
{
for(j=i;j<no;j++)
{
temp=ar[i][j];
ar[i][j]=ar[j][i];
ar[j][i]=temp;
}
}
```

```
for(i=0;i<no;i++)
{
for(j=0;j<no;j++)
{
printf("%d\t",ar[i][j]);
}
printf("\n");
}
}
```

42.WAP to check entered string is palindrom or not.

```
#include<stdio.h>
#include<string.h>
void main()
{
char ar[100],rev[100];
int len=0,i;
printf("Enter string\n");
gets(ar);
while(ch[len]!='\0')                    / / finding length of string
        {
        len++;
        }
for(i=0;i<len;i++)                      // reversing the string
{
rev[i]=ar[len-1-i];
}
 for(i=0;i<=n-1;i++)                    // cheking reverse string is same as that of original string
{
  if(a[i]!=rev[i])
   break;
}
if(i==n)
printf("The string is palindrome.");
else     printf("The string is not palindrome.");   }
```

43.WAP to explain the working of string functions.

```
#include<stdio.h>
#include<string.h>
void main()
{
char a[50],b[50],c[50];
int choice,len;
printf("Enter 2 Strings\n");
gets(a);
gets(b);
printf("select:1.lenght\t2.copy\t3.merge\t4.compare\n");
scanf("%d",&choice);
switch(choice)
{
case 1: len=strlen(a);
        printf("Length=%d\n",len);
        break;
case 2:strcpy(b,a);
       printf("Copied string:%s",b);
       break;
case 3:strcat(b,a);
       printf("String after merge:%s",b);
       break;
case 4:
           if(strcmp(a,b)==0);
       printf("strings are equal\n");
       break;

default:printf("Invalid choice\n");
}
}
```

44.Explain Call by value with example.

```
#include<stdio.h>
void swap (int a, int b)
{
        int temp;
        temp=a;
        a=b;
        b=temp;
       printf("The values of a and b in the swap function after swapping are %d and %d\n",a,b);
}
void main()
{
        int a,b;
        printf("Enter two numbers:");
        scanf("%d %d",&a,&b);
printf("The values of a and b in the main function before calling the swap function are %d and %d\n",a,b);
        swap(a,b);
printf("The values of a and b in main function after calling the swap function are %d and %d\n",a,b);
}
```

45.Explain Call by reference with example.

```
#include<stdio.h>
void swap (int *p1, int *p2)
{
        int temp;
        temp=*p1;
        *p1=*p2;
        *p2=temp;
printf("The values of a and b in the swap function after swapping are %d and %d\n",*p1,*p2);
}



void main()
{
        int a,b;
        printf("Enter two numbers:");
        scanf("%d %d",&a,&b);
printf("The values of a and b in the main function before calling the swap function are %d and %d\n",a,b);
       swap(&a,&b);
printf("The values of a and b in main function after calling the swap function are %d and %d\n",a,b);
}
```

Structure

46.wap to store and display the name, roll number of a student using structure.

```
#include<stdio.h>
struct student
{
        char name[20];
        int roll_no;
        float fees;
};
void main ()
{
        struct student s1;
        printf("Enter the student's name, roll number and fees paid:");
        gets(s1.name);
        scanf("%d %f",&s1.roll_no,&s1.fees);
        printf("The student details are as follows:\nName:%s\nRoll number:%d\nFees:
%f\n",s1.name,s1.roll_no,s1.fees);
}
```

47.WAP to store and display the name, run scored and wicket taken of 'n' cricket players using structure.

```
#include<stdio.h>
struct cricketer
{
        char name[20];
        int runs, wickets;
};
void main ()
{
        struct cricketer c[100];
        int n,i;
        printf("Enter the number of cricketers");
        scanf("%d",&n);
```

```
        for(i=0;i<=n-1;i++)
        {
                printf("Enter the cricketer's name, runs scored and wickets taken:");
                scanf("%s %d %d",c[i].name,&c[i].runs,&c[i].wickets);
        }
                printf("Name\tRuns\tWickets\n");
                printf("-----------------------------------\n");
                for(i=0;i<=n-1;i++)
        {
                printf("%s\t%d\t%d\n",c[i].name,c[i].runs,c[i].wickets);
        }
}
```

48.WAP to store the name,roll number and marks in 3 subject of 'n' student using structure.display the output in the form of maximum to minimum marks scorer.

```
#include<stdio.h>
struct student
{
        char name[20];
        int roll_no;
        int physics,chem,maths,total;
};
void main ()
{
        struct student s[100],temp;
        int n,i,j;
        clrscr();
        printf("Enter the number of students");
        scanf("%d",&n);
        for(i=0;i<=n-1;i++)
        {
        printf("Enter the student's name, roll number and marks in three subjects:");
        scanf("%s %d %d %d",s[i].name, &s[i].roll_no,&s[i].physics,&s[i].chem,&s[i].maths);
        s[i].total=s[i].physics+s[i].chem+s[i].maths;
        }
```

```
        for(i=0;i<=n-1;i++)                    //sorting students according to there marks
        {
                for(j=0;j<=n-2;j++)
                {
                        if(s[j].total<s[j+1].total)
                        {
                                temp=s[j];
                                s[j]=s[j+1];
                                s[j+1]=temp;
                        }
                }
        }
        printf("Name\tRoll No\tPhysics\tChem\tMaths\tTotal\n");
        printf("-----------------------------------------------\n");
        for(i=0;i<=n-1;i++)
        {
printf("%s\t%d\t%d\t%d\t%d\t
%d\n",s[i].name,s[i].roll_no,s[i].physics,s[i].chem,s[i].maths,s[i].total);
        }
}
```

49.WAP to store the radius and centre of a circle using a nested structure.

```
#include<stdio.h>
struct circle
{
        float radius;
        struct
        {
                float x,y;
        }centre;
};
```

```
void main ()
{
struct circle c;
printf("Enter the radius and x and y co-ordinates of circle:");
scanf("%f %f %f",&c.radius,&c.centre.x,&c.centre.y);
printf("Circle Information\nRadius=%f\nCentre co-ordinates:%f,%f",c.radius,c.centre.x,c.centre.y);
}
```

50.WAP to accept a set of cahrecters from user until user presses the full stop, store this in the file. Also read the file and display the content of it.

```
# include<stdio.h>
void main()
{
	FILE *fp;
	char c=' ';
	fp=fopen("test.txt","w");
	printf("Write data to be stored in the file and once completed press the full stop (.):\n");
	while(c!='.')
	{
		scanf("%c",&c);
		fputc(c,fp);
	}
	fclose(fp);
	fp=fopen("test.txt","r");
	while(!feof(fp))
	{
		printf("%c",getc(fp));
	}
	fclose(fp);
}
```

ALL THE BEST :)