

LAB ASSIGNMENT FOR BCA

SNO	Program Definitions
SIMPLE PROGRAMS USING printf() and scanf()	
1	<p>Write a program to Print "Hello World" On screen.</p> <pre>#include<stdio.h> #include<conio.h> main() { clrscr(); printf("Hello World"); getch(); }</pre>
2	Write a program to Print Your BIO-DATA On screen.
3	<p>Write a c program to accept an integer value from user and print it on screen.</p> <pre>#include<stdio.h> #include<conio.h> main() { int a; clrscr(); printf("ENTER VALUE OF A: "); scanf("%d",&a); printf("\nThe Value is %d",a); getch(); }</pre>
4	<p>Write a c program to accept two values from user and display addition, subtraction, multiplication, division of those value</p> <pre>#include<stdio.h> #include<conio.h> main() { int a,b,c; printf("\n Enter value 1 :"); scanf("%d",&a); printf("\n Enter value 2 :"); scanf("%d",&b); c = a+b; printf("\n %d + %d = %d",a,b,c); c = a-b; printf("\n %d - %d = %d",a,b,c); c = a*b; printf("\n %d * %d = %d",a,b,c); c = a/b; printf("\n %d / %d = %d",a,b,c); c = a%b; printf("\n %d %% %d = %d",a,b,c); }</pre>
5	<p>Write a program to read the value of x & y and print the result of the following expression in one line.</p> <p>(a) $(x + y) / (x - y)$ (b) $(x + y) / 2$ (c) $(x + y) * (x - y)$</p> <pre>#include<stdio.h> #include<conio.h> main() { float x,y;</pre>

	<pre> clrscr(); printf("\n Enter value of X :"); scanf("%f",&x); printf("\n Enter value of Y :"); scanf("%f",&y); printf("(x + y)/ (x-y) = %f", (x+y)/(x-y)); printf("(x + y)/2 = %f", (x+y)/2); printf("(x + y)/ (x-y) = %f", (x+y)*(x-y)); getch(); } </pre>
6	<p>Write a program to calculate the simple interest.</p> <pre> #include<stdio.h> #include<conio.h> main() { int p,r,n,i; clrscr(); printf("Enter P:-"); scanf("%d",&p); printf("Enter R:-"); scanf("%d",&r); printf("Enter n:-"); scanf("%d",&n); i=(p/100)*r*n; printf("value of I is :-%d",i); getch(); } </pre>
7	<p>Input two numbers and prints its square and cube.</p> <pre> #include<stdio.h> #include<conio.h> main() { int n,sq,cu; clrscr(); printf("Enter number:-"); scanf("%d",&n); sq= n*n; cu =n*n*n; printf(" Square of number is %d",n); printf(" cube of number is %d",n); getch(); } </pre>
8	<p>Write a program to calculate area of triangle (area = $\frac{1}{2}$ * base * height)</p> <pre> #include<stdio.h> #include<conio.h> main() { float b,h,area; clrscr(); printf("Enter Base:-"); scanf("%f",&b); printf("Enter Height:-"); scanf("%f",&h); } </pre>

	<pre> area =(base*height)/2; printf(" Area of Triangle is %f", area); getch(); } </pre>
9	<p>Write a program to calculate and print volume of sphere. $(V=4/3*\pi*R^2)$</p> <pre> #include<stdio.h> #include<conio.h> #define PI 3.14 main() { float r1,r2,r3,volumn; clrscr(); printf("Enter R1 :"); scanf("%f",&r1); printf("\nEnter R2 :"); scanf("%f",&r2); printf("\nEnter R3 :"); scanf("%f",&r3); volumn = PI*r1*r2*r3*(float)4/3; printf("\nThe volumn is %f",volumn); getch(); } </pre>
10	<p>Write a program to calculate and print volume of cone $(V=1/3 *\pi* R^2*H)$.</p> <pre> #include<stdio.h> #include<conio.h> main() { float r,h,area; const float PI=3.14; clrscr(); printf("Enter Radios :-"); scanf("%f",&r); printf("Enter Height:-"); scanf("%f",&h); area =(PI*r*r*h)/3; printf(" Volume of cone %f", area); getch(); } </pre>
11	<p>Write a program to calculate and print perimeter of circle ($2*\pi*r$)</p> <pre> #include<stdio.h> #include<conio.h> main() { float r,area; const float PI=3.14; clrscr(); printf("Enter Radios :-"); scanf("%f",&r); area =(2.0*PI*r); printf(" Perimeter of Circle %f", area); getch(); } </pre>

12	<p>Write a program to Input two values and swap them. (without using third variable)</p> <pre>#include<stdio.h> #include<conio.h> main() { int a,b,c; clrscr(); printf("Enter 1st Number :"); scanf("%d",&a); printf("Enter 2nd Number :"); scanf("%d",&b); c=a; a=b; b=c; printf("1st value is %d \n2nd Value is %d",a,b); getch(); }</pre>
13	<p>Write a program to calculate Fahrenheit to Celsius. $C = (F - 32) / 1.8$</p> <pre>#include<stdio.h> #include<conio.h> main() { float f, c ; clrscr(); printf("Enter Fahrenheit Value:"); scanf("%f",&f); c = (f-32.0)/1.8; printf("Fahrenheit to Celsius : %f", c); getch(); }</pre>
14	<p>Write a program to calculate Celsius to Fahrenheit $F = C * 1.8 + 32$.</p> <pre>#include<stdio.h> #include<conio.h> main() { float f, c ; clrscr(); printf("Enter Celsius Value:"); scanf("%f",&c); f = (c*1.8)+32.0; printf("Celsius to Fahrenheit: %f", f); getch(); }</pre>
15	<p>Prepare a pay slip. Employee code, basic salary Calculate as below: DA is 180% of basic, HRA is 10% of Basic, PF is 14% of Basic. Gross Total= DA+HRA+Basic. Net Salary=Gross Salary – PF</p> <pre>#include<stdio.h> #include<conio.h> void main() {</pre>

	<pre> float bs,hra,da,pf,net; clrscr(); printf("Enter the basic Salary:-"); scanf("%f",&bs); da=bs*1.80; hra=bs*0.1; pf=bs*0.14; net=bs+hra+da; printf(" \nBASIC %f",bs); printf(" \nHRA %f",hra); printf(" \n DA %f",da); printf("\nNet salary is %.2f",net); getch(); } </pre>
16	<p>The distance between two cities (in KM) is input through the keyboard. Write a program to convert and print this distance in meters, feet, inches and centimeters.</p> <pre> #include<stdio.h> #include<conio.h> void main() { float km,me,feet,inch,cen; clrscr(); printf("Enter the KiloMeter:-"); scanf("%f",&km); me=km*1000.0; feet=km*3280.83; inch=km*39370.0; cen=km*100000.0; printf(" \n KiloMeter %f",km); printf(" \n meters %f",me); printf(" \n feet %f",feet); printf(" \n inches %f",inch); printf("\ncentimeters %.2f",cen); getch(); } </pre>
17	<p>If the marks obtained by a student in five different subjects are input through the keyboard, find out the aggregate marks and percentage marks obtained by the student. Assume that the maximum marks that can be obtained by a student in each subjects is 100.</p> <pre> #include<stdio.h> #include<conio.h> main() { int srno,m1,m2,m3,m4,m5,total,c=0; float per; clrscr(); printf("Enter Srno : "); scanf("%d",&srno); printf("Enter Subject 1 Marks : "); scanf("%d",&m1); printf("Enter Subject 2 Marks : "); </pre>

	<pre> scanf("%d",&m2); printf("Enter Subject 3 Marks : "); scanf("%d",&m3); printf("Enter Subject 4 Marks : "); scanf("%d",&m4); printf("Enter Subject 5 Marks : "); scanf("%d",&m5); total = m1+m2+m3+m4+m5; per =(float)total/5; printf("\nTotal : %d",total); printf("\nPercentage : %.2f",per); getch(); } </pre>
18	<p>Write a program to interchange the value of 2 variables without using 3rd variable.</p> <pre> #include<stdio.h> #include<conio.h> main() { int a,b; printf("Enter Value : "); scanf("%d",&a); printf("Enter Value : "); scanf("%d",&b); a=a+b; b=a-b; a=a-b; printf("\n value of a is %d",a); printf("\n value of b is %d",b); } </pre>
IF ELSE AND SWITCH CASE	
19	<p>Write a program in C to read character from user and change upper to lower ?</p> <pre> #include<stdio.h> #include<conio.h> main() { char a; clrscr(); printf("Enter Character from user :"); a=getchar(); if(a>='A' && a<='Z') { printf("%c ",a+32); } getch(); } </pre>
20	<p>Write a program in C to check whether the given number is even or odd?</p> <pre> #include<stdio.h> #include<conio.h> main() { int a; printf("Enter Number :"); scanf("%d",&a); if(a%2==0) { </pre>

	<pre> printf("\nEven"); } if(a%2==1) { printf("\nODD"); } } } } } } } } </pre>
21	<p>Write a program in C to check whether the given year is leap or not?</p> <pre> #include<stdio.h> #include<conio.h> main() { int year; printf("Enter value :"); scanf("%d",&year); if(year%4==0) { printf("Leap Year"); } if(year%4!=0) { printf("Not Leap Year"); } } </pre>
22	<p>Write a program in C to find biggest of two given numbers?</p> <pre> #include<stdio.h> #include<conio.h> main() { int a,b; clrscr(); printf("ENTER A VALUE : "); scanf("%d",&a); printf("ENTER A VALUE : "); scanf("%d",&b); if(a>b){ printf(" 1st Number Max "); } If (a<b) { printf(" 2nd Number Max "); } getch(); } </pre>
23	<p>Write a program in C to find biggest of three given numbers using && operator?</p> <pre> #include<stdio.h> #include<conio.h> main() { int a,b, c; clrscr(); printf("ENTER VALUE 1st No: "); scanf("%d",&a); printf("ENTER VALUE : 2nd No "); scanf("%d",&b); printf("ENTER VALUE 3rd No: "); scanf("%d",&c); } </pre>

	<pre> if(a>b && a>c) { printf(" 1st Number Max "); } if(b>a && b>c) { printf(" 2nd Number Max "); } if(c>a && c>b) { printf(" 3rd Number Max "); } getch(); } </pre>
24	<p>Write a program in C input a character to check whether the given number is a vowel or not.</p> <pre> #include<stdio.h> #include<conio.h> main() { char a; printf("Enter Character from user :"); a=getchar(); if(a=='a' a=='A' a=='e' a=='E' a=='i' a=='I' a=='o' a=='O' a=='u' a=='U') { printf("\n VOWEL CHARACTER"); } else { printf("\n NOT VOWEL CHARACTER "); } } </pre>
25	<p>Write a program in C to read three numbers from user and display maximum number?</p> <pre> #include<stdio.h> #include<conio.h> main() { int a,b,c; printf("Enter 1st Value : "); scanf("%d",&a); printf("Enter 2nd Value : "); scanf("%d",&b); printf("Enter 3rd Value : "); scanf("%d",&c); if(a>b) { if(a>c) { printf("A is Max"); } Else { printf("C is Max"); } } else { if(b>c) { printf("B is Max"); } else { printf("C is Max"); } } } </pre>

	<pre> } } }</pre>
26	<p>Write a program in C to check whether the given character is upper, lower, number or special symbols?</p> <pre> #include<stdio.h> #include<conio.h> main() { char a; printf("Enter Character from user :"); a=getchar(); if(a>='A' a<='Z') { printf("\nUPPER CASE"); } else if (a>='a' a<='z') { printf("\nLOWER CASE"); } else if (a>='0' a<='9') { printf("\nNumber"); } else { printf("\nSpecial Symbol"); } Getch(); }</pre>
27	<p>Write a program in C to print a word form of given number between 0 to 9 ?</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a; clrscr(); printf("Enter the value of first:-"); scanf("%d",&a); if(a==1) { printf("ONE"); } else if(a==2) { printf("TWO"); } else if(a==3) { printf("THREE"); } else if(a==4) { printf("FOUR"); } else if(a==5) { printf("FIVE"); } else if(a==6) { printf("SIX"); } else if(a==7) { </pre>

	<pre> printf("SEVEN"); } else if(a==8) { printf("EIGHT"); } else if(a==9) { printf("NINE"); } else { printf("PLZ INPUT BETWEEN 0 TO 9"); } getch(); } </pre>								
28	<p>Write a C program to read three values from user and check maximum number, if user enters any two or all values are equal then display Proper message.</p> <pre> #include<conio.h> #include<stdio.h> main() { int a,b,c; printf("Enter 1st Value :"); scanf("%d",&a); printf("Enter 2nd Value :"); scanf("%d",&b); printf("Enter 3rd Value :"); scanf("%d",&c); if(a==b && a==c) printf("ALL are Equal"); else if(a==b && a>c) printf("A and B are Equal and Max"); else if(a==b && a<c) printf("A and B are Equal but C is Max"); else if(a==c && a>b) printf("A and C are Equal and Max"); else if(a==c && a<b) printf("A and C are Equal but B is Max"); else if(b==c && b>a) printf("B and C are Equal and Max"); else if(b==c && b<a) printf("B and C are Equal but A is Max"); else if(a>b && a>c) printf("A is Max"); else if(b>a && b>c) printf("B is Max"); else printf("C is Max"); getch(); } </pre>								
29	<p>Accept rate and quantity and calculate its amount and give discount as under.</p> <table> <thead> <tr> <th>Amount</th><th>Discount</th></tr> </thead> <tbody> <tr> <td>1001 to 10000</td><td>5%</td></tr> <tr> <td>10001 to 15000</td><td>7%</td></tr> <tr> <td>15001 to 20000</td><td>9%</td></tr> </tbody> </table>	Amount	Discount	1001 to 10000	5%	10001 to 15000	7%	15001 to 20000	9%
Amount	Discount								
1001 to 10000	5%								
10001 to 15000	7%								
15001 to 20000	9%								

Above 20000 12%

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int qty;
    float rate,amt,dis;
    clrscr();
    printf("Enter Quantity:-");
    scanf("%d",&qty);
    printf("Enter Rate ");
    scanf("%f",&rate);

    amt = (float)qty*rate;

    if(amt>=1001.00 && amt<=10000.00)
        dis=amt*0.05;
    else if(amt>10000.00&& amt<=15000.00)
        dis=amt*0.07;
    else if(amt>15000.00 && amt<=20000.00)
        dis=amt*0.09;
    else
        dis=amt*0.12;
    printf("Amount of Bill:-%.2f",amt);
    printf("Discount of Bill:-%.2f",dis);
    printf(" Payable of Bill:-%.2f",amt-dis);
    getch();
}
```

30 write a program to calculate electric city bill

Units	rate
0-200	.50 Rs.
201- 400	above 200 per @ .65 +100
401- 600	above 400 per @ .80 +230
601 and above	above 600 per @ 1.00 +390

Print the customer number and payable amount.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int cno;
    float rate,unit;
    clrscr();
    printf("Enter Customer Number");
    scanf("%d",&cno);
    printf("ENter the unit:-");
    scanf("%f",&unit);

    if(unit>=0 && unit<=200)
        rs=unit*0.50;
    else if(unit>=201&& unit<=400)
        rs=100.00 + (unit-200)*0.65;
```

	<pre> else if(unit>=401 && unit<=600) rs=230.00 + (unit-240)*0.80; else rs=390.00 + (unit-600)*1.00; printf(" The Customber Number %d",cno); printf("The elictricity bill is :-%.2f",rs); getch(); } </pre>
31	<p>Write a c program to accept age and gender from user. if user enter 'M' and 'm' and age greater than equal to 21 or user enter 'F' and 'f' and age greater than equal to 18 then display "Allow for Marriage "</p> <pre> #include<stdio.h> #include<conio.h> main() { char g; int age; clrscr(); printf("Enter Gender : "); g=getchar(); printf("Enter Age : "); scanf("%d",&age); if(g=='m' g=='M' g=='f' g=='F') { if((g=='m' g=='M') && age>=21) printf("Male is Allow To Marriage"); else if((g=='f' g=='F') && age>=18) printf("Female is Allow To Marriage"); else printf("Invalid Input"); } else printf("Only Input M For Male and F For Female"); getch(); } </pre>
32	<p>Write a c program to accept percentage value from user and display grade.</p> <pre> #include<conio.h> #include<stdio.h> main() { float a; printf("Enter Value :"); scanf("%f",&a); if (a>100 a<=0) printf("Invalid Input Plz Input Between 1 to 100"); if(a>=91) printf("A1"); else if(a>=81) printf("A2"); else if(a>=71) printf("B1"); else if(a>=61) printf("B2"); } </pre>

	<pre> else if(a>=51) printf("C1"); else if(a>=41) printf("C2"); else if(a>=33) printf("D"); else printf("E/F"); } </pre>
33	<p>Get a character form user and tell whether it is vowel or consonant. (switch)</p> <pre> #include<conio.h> #include<stdio.h> main() { char a; printf("Enter Character from user :"); a=getchar(); switch (a) { case 'A': case 'E': case 'I': case 'O': case 'U': case 'a': case 'e': case 'i': case 'o': case 'u': printf("\n VOWEL CHARACTER"); break; default : printf("\n NOT VOWEL CHARACTER "); } getch(); } </pre>
34	<p>Write a program in C to display the name of the day in a week .here given input range is 1 to 7. ? (switch)</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a; clrscr(); printf("Enter the day no.:-"); scanf("%d",&a); switch (a) { case 1: printf(" Sunday"); break; case 2: printf(" Monday"); break; case 3: printf(" Tuesday"); break; } } </pre>

```

case 4:
    printf(" Wednesday");
    break;
case 5:
    printf(" Thursday");
    break;
case 6:
    printf(" Friday");
    break;
case 7:
    printf(" Saturday");
    break;
default :
    printf("There are only seven days");
}
getch();
}

```

35 Write a C program to accept grno and four subject internal or theory marks from user , prepare marksheet with proper validation and display grno, internal and theory marks and also total ,percentage, grade, result

```

(1) Internal marks between 0 to 30 and minimum 12
(2) Theory marks between 0 to 70 and minimum 28
#include<stdio.h>
#include<conio.h>
main() {
    int grno,im1,im2,im3,im4,tm1,tm2,tm3,tm4,total;
    float per;
    clrscr();
    printf("Enter Grno : ");
    scanf("%d",&grno);
    printf("\n Internal MArks \n");
    printf(" Enter Subject 1 : ");
    scanf("%d",&im1);
    printf(" Enter Subject 2 : ");
    scanf("%d",&im2);
    printf(" Enter Subject 3 : ");
    scanf("%d",&im3);
    printf(" Enter Subject 4 : ");
    scanf("%d",&im4);
    printf("\n Theory MArks \n");
    printf(" Enter Subject 1 : ");
    scanf("%d",&tm1);
    printf(" Enter Subject 2 : ");
    scanf("%d",&tm2);
    printf(" Enter Subject 3 : ");
    scanf("%d",&tm3);
    printf(" Enter Subject 4 : ");
    scanf("%d",&tm4);
    if( ! ((im1>=0 && im1<=30) && (im2>=0 && im2<=30) &&
        (im3>=0 && im3<=30) && (im4>=0 && im4<=30))) {
        printf("Plz Enter Internal marks Between 0 to 30");
    }
}

```

	<pre> else if(! ((tm1>=0 && tm1<=70) && (tm2>=0 && tm2<=70) && (tm3>=0 && tm3<=70) && (tm4>=0 && tm4<=70))) { printf("Plz Enter Theory marks Between 0 to 70"); } Else { if(im1>=12 && im2>=12 && im3>=12 && im4>=12 && tm1>=28 && tm2>=28 && tm3>=28 && tm4>=28) { total = im1+im2+im3+im4+tm1+tm2+tm3+tm4; per=total/4; printf("\n Total : %d",total); printf("\n Per : %f",per); printf("\n Res : PASS"); if(per>=90) printf("\n Grade : A+"); else if(per>=80) printf("\n Grade : A"); else if(per>=70) printf("\n Grade : B"); else if(per>=60) printf("\n Grade : C"); else if(per>=50) printf("\n Grade : D"); else printf("\n Grade : E"); } else { total = im1+im2+im3+im4+tm1+tm2+tm3+tm4; printf("\n Total : %d",total); printf("\n Per :*****"); printf("\n Res : FAIL"); printf("\n Grade : F"); } } getch(); } </pre>
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LOOPS

36	<p>Write a c program to Print 1 to 10.</p> <pre> #include<stdio.h> #include<conio.h> void main(){ int a=1; clrscr(); while(a<=10) { printf("\n%d",a); a++; } getch(); } </pre>
37	<p>Write a c program to print 2, 4, 6, 8, 10.... N</p> <pre> #include<stdio.h> #include<conio.h> </pre>

	<pre> void main(){ int n,a=2; clrscr(); printf("Enter Number : "); scanf("%d",&n); while(a<=n) { printf("\n%d",a); a+=2; } getch(); } </pre>
38	<p>Write a c program to print 1, 2, 4 , 8, 16, 32, 64,.... N</p> <pre> #include<stdio.h> #include<conio.h> void main(){ int n,a=1; clrscr(); printf("Enter Number of step Value : "); scanf("%d",&n); while(a<=n) { printf("\n%d",a); a*=2; } getch(); } </pre>
39	<p>Write a c program to print 100 99 98 97 N</p> <pre> #include<stdio.h> #include<conio.h> void main(){ int n,a=100; clrscr(); printf("Enter Number of step Value : "); scanf("%d",&n); while(a>=n) { printf("\n%d",a); a--; } getch(); } </pre>
40	<p>Write a program to print all ASCII values and their equivalent characters using a while loop, the ASCII values from 0 to 255</p> <pre> #include<stdio.h> #include<conio.h> void main(){ int n,a=0; clrscr(); printf("Enter Number of step Value : "); scanf("%d",&n); while(a<=255) { </pre>

	<pre> printf("\n KeyASCII %d and Character %c",a,a); a++; } getch(); } </pre>
41	<p>Write a c program to accept a number from user and display table of that number.</p> <pre> #include<stdio.h> #include<conio.h> void main(){ int n,i=0; clrscr(); printf("Enter Number of step Value : "); scanf("%d",&n); while(i<=10) { printf("\n %2d X %2d = %2d,n,i,n*i); i++; } getch(); } </pre>
42	<p>Write a C program Input five digit integer number and display reverse that number.</p> <pre> #include<stdio.h> #include<conio.h> main() { int n,sum=0,d; clrscr(); printf("\n Enter No of Step :"); scanf("%d",&n); while(n!=0) { d=n%10; sum=(sum*10)+d; n=n/10; } printf("\n Reverse no = %d",sum); getch(); } </pre>
43	<p>Write a C program to Input an integer number and display sum of its digits.</p> <pre> void main(){ int n,sum=0,i,d; clrscr(); printf("\nEnter a Number : "); scanf("%d",&n); while(n!=0) { d=n%10; sum+=d; n=n/10; } printf("sum of digit is %d",sum); getch(); } </pre>
44	<p>Write a C program to Input an integer number and display sum of even digit and odd digits.</p> <pre> #include<stdio.h> </pre>

	<pre> #include<conio.h> main() { int d,esum=0,osum=0,n,ex; clrscr(); printf("Enter Number : "); scanf("%d",&n); while(n!=0) { d=n%10; if(d%2==0) esum+=d; else osum+=d; n/=10; } printf("\n Even Digit is Sum %d",esum); printf("\n Odd Digit is Sum %d",osum); getch(); } </pre>
45	<p>Write a C program to Input integer number and check whether it is palindromes or not.</p> <pre> #include<stdio.h> #include<conio.h> main() { int n,sum=0,d,ex; clrscr(); printf("\n Enter Number :"); scanf("%d",&n); ex=n; while(n!=0) { d=n%10; sum=(sum*10)+d; n=n/10; } if(sum==ex) printf("Polindrome No"); else printf("Not Polindrome No"); getch(); } </pre>
46	<p>Write a C program to Input integer number from user and display its factorial.</p> <pre> #include<stdio.h> #include<conio.h> main() { int n,sum=1,i=1; clrscr(); printf("Enter Number :"); scanf("%d",&n); while(i<=n) { sum*=i; i++; } printf("%d Factorial is %d",n,sum); getch(); } </pre>

	<pre> } </pre>
47	<p>Write a C program to Input integer number from user and find that number is prime or not.</p> <pre> #include<stdio.h> #include<conio.h> main() { int n,i,f=0; clrscr(); printf("\n Enter No of Step :"); scanf("%d",&n); i=2; while(i<n) { if(n%i==0) { f=1; break; } i++; } if(f==0) printf("\n Prime no = %d",n); else printf("\n Not Prime no = %d",n); getch(); } </pre>
48	<p>Write a program to print all prime numbers from 1 to 500.</p> <pre> #include<stdio.h> #include<conio.h> main() { int n=2,i,f=0; clrscr(); while(n<=500) { f=0; i=2; while(i<n) { if(n%i==0) { f=1; break; } i++; } if(f==0) printf("\n Prime no = %d",n); n++; } getch(); } </pre>
49	<p>Accept one no from user and find if it is Armstrong or not.</p> <p>Example. $153 = (1*1*1) + (5*5*5) + (3*3*3)$ $= 1 + 125 + 27$ $= 153$</p> <pre> #include<stdio.h> #include<conio.h> </pre>

	<pre> void main(){ int n,ex,a,sum=0; clrscr(); printf("\nEnter the No.:%d:-",i); scanf("%d",&n); ex=n; while(n!=0) { a=n%10; sum+=a*a*a; n=n/10; } if(ex==sum) printf("\nNumber is Armstrong"); else printf("\n Number is not Armstrong"); getch(); } </pre>
50	<p>Fibonacci series</p> <p>Write a c program to input an integer number from user and Print 0 1 1 2 3 5 8 13 21 34 55 ... N</p> <pre> #include<stdio.h> #include<conio.h> main() { int i,n,a=1,b=0,c=0; clrscr(); printf("Enter Number Of Step :"); scanf("%d",&n); for(i=1;i<=n;i++) { printf("\t%d",c); c=a+b; a=b; b=c; } getch(); } </pre>
51	<p>$1! + 2! + 3! + 4! + \dots + n!$</p> <pre> #include<stdio.h> #include<conio.h> void main() { long i,j,sum=0,n,fact; clrscr(); printf("Enter Number :-"); scanf("%ld",&n); for(i=1;i<=n;i++) { fact=1; for(j=1;j<=i;j++) { fact*=j; } printf(" %ld! +",i); sum+=fact; } } </pre>

	<pre> printf("\nFactorial sum is %ld",sum); getch(); } </pre>
52	<p>12 + 22 + 32 + 42 +..... + n²</p> <pre> #include<stdio.h> #include<conio.h> void main() { int i,n,sum=0,x=12; clrscr(); printf("Enter Number :-"); scanf("%d",&n); for(i=1;i<=n;i++) { printf(" %d +",x); sum+=x; x+=10; } printf("\nsum is %d",sum); getch(); } </pre>
53	<p>1+1/2+1/3+1/4 + 1/n.</p> <pre> #include<stdio.h> #include<conio.h> void main() { int i,n; float sum=0.0; clrscr(); printf("Enter Number :-"); scanf("%d",&n); for(i=1;i<=n;i++) { printf(" 1/%d +",i); sum+=(float)1/i; } printf("\nsum is %f",sum); getch(); } </pre>
54	<p>1+1/3+1/5+1/7 + 1/20.</p> <pre> #include<stdio.h> #include<conio.h> void main() { int i,n,x=1; float sum=0.0; clrscr(); printf("Enter Number :-"); scanf("%d",&n); for(i=1;i<=n;i++) { printf(" 1/%d +",x); sum+=1.0/x; x+=2; } printf("\nsum is %f",sum); } </pre>

	<pre> getch(); } </pre>
55	<p>Input any integer number. Write a program to find out all its divisors. e.g. input number is 10 o.p. 2 5 10</p> <pre> #include<stdio.h> #include<conio.h> main() { int i,n; clrscr(); printf("Enter Number Of Step :"); scanf("%d",&n); for(i=2;i<=n;i++) { if(n%i ==0) printf("\t%2d",i); } getch(); } </pre>
56	<p>Write a program to find out Armstrong from 1 to 1000.</p> <pre> #include<stdio.h> #include<conio.h> void main(){ int i,n,ex,a,sum=0; clrscr(); for (i=1; i<=1000;i++) { ex=i; sum=0; while(ex!=0) { a=ex%10; sum+=a*a*a; ex=ex/10; } if(i==sum) printf("\nNumber is Armstrong %d", i); } getch(); } </pre>
57	<p>Write a program to calculate and display square, cubes and factorials of all integer numbers from 1 to 10.</p> <pre> #include<stdio.h> #include<conio.h> void main(){ int i,n,j; long fact; clrscr(); printf("\t Number\t Square\t Cube\t Factorial\n"); for (i=1; i<=10;i++) { fact=1; for(j =1; j<=i;j++) { fact*=j; } } } </pre>

	<pre> printf("\t%2d\t%2d\t%2d\t%2ld",i,i*i,i*i*fact); } getch(); } </pre>	
Write a C program to print following output		
58	<pre> 12345 12345 12345 12345 12345 </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j; clrscr(); for (i=1; i<=5;i++) { for(j =1; j<=5;j++) { printf("%2d",j); } Printf("\n"); } getch(); } </pre>
59	<pre> 11111 22222 33333 44444 55555 </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j; clrscr(); for (i=1; i<=5;i++) { for(j =1; j<=5;j++) { printf("%2d",i); } Printf("\n"); } getch(); } </pre>
60	<pre> 1 2 3 4 5 2 4 6 8 10 3 6 9 12 15 4 8 12 16 20 5 10 15 20 25 </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j,k=1; clrscr(); for (i=1; i<=5;i++) { k=i; for(j =1; j<=5;j++) { printf("%2d",k); k+=i; } Printf("\n"); } getch(); } </pre>
61	<pre> 1 12 123 1234 12345 </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j; clrscr(); for (i=1; i<=5;i++) { </pre>

		<pre> for(j =1; j<=i;j++) { printf("%2d",j); } Printf("\n"); } getch(); } </pre>	
62	<pre> 5 54 543 5432 54321 </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j; clrscr(); for (i=5; i>=1;i--) { for(j =5; j>=i;j--) { printf("%2d",j); } Printf("\n"); } getch(); } </pre>	
63	<pre> 1 21 321 4321 54321 </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j; clrscr(); for (i=1;i<=5;i++) { for(j =i; j>=1;j--) { printf("%2d",j); } printf("\n"); } getch(); } </pre>	
64	<pre> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j,k=1; clrscr(); for (i=1;i<=5;i++) { for(j =1; j<=i;j++) { printf("%2d",k++); } printf("\n"); } getch(); } </pre>	
65	<pre> A A b A b C A b C d A b C d E </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j,k=1; clrscr(); for (i=1;i<=5;i++) { </pre>	

		<pre> for(j =1; j<=i;j++) { if(j%2==1) printf("%2c",j+64); else printf("%2c",j+96); } printf("\n"); } getch(); } </pre>	
66	<pre> E dd CCC bbbb AAAAA </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j; clrscr(); for (i=5; i>=1;i--) { for(j =5; j>=i;j--) { if(i%2==0) printf("%2c",i+96); else printf("%2c",i+64); } Printf("\n"); } getch(); } </pre>	
67	<pre> * \$ \$ * * * \$ \$ \$ \$ * * * * * \$ \$ \$ \$ \$ </pre>	<pre> #include<stdio.h> #include<conio.h> void main(){ int i,j; clrscr(); for (i=5; i>=1;i--) { for(j =5; j>=i;j--) { if(i%2==1) printf(" *"); else printf(" \$"); } printf("\n"); } getch(); } </pre>	
68	<pre> 1 2 2 3 3 3 4 4 4 4 5 5 5 5 5 </pre>	<pre> #include<stdio.h> #include<conio.h> main() { int i,j,k,sp=5,a; clrscr(); for(i=1;i<=5;i++) { for(j=1;j<=sp;j++) { printf(" "); } } } </pre>	

		<pre> sp--; for(j=1;j<=i;j++) printf("%2d",i); } printf("\n"); } getch(); } </pre>	
69	<pre> A B C D E D C B A A B C D D C B A A B C C B A A B B A A A </pre>	<pre> #include<stdio.h> #include<conio.h> main() { int i,j,k,sp=-1,a; clrscr(); for(i=5;i>=1;i--) { for(j=1;j<=i;j++) { printf("%2c",j+64); } for(k=1;k<=sp;k++) { printf(" "); } sp+=2; if(i==5) a=4; else a=i; for(j=a;j>=1;j--) { printf("%2c",j+64); } printf("\n"); } getch(); } </pre>	
70	<pre> 1 2 1 2 3 2 1 2 3 4 3 2 1 2 3 4 5 4 3 2 1 2 3 4 5 </pre>	<pre> #include<stdio.h> #include<conio.h> main() { int i,j,k,sp=4,a; clrscr(); for(i=1;i<=5;i++) { for(k=1;k<=sp;k++) { printf(" "); } sp--; for(j=i;j>=1;j--) { printf("%2d",j); } for(j=2;j<=i;j++) { printf("%2d",j); } printf("\n"); } getch(); } </pre>	

		}	
71	A B C D E D C B A A B C D D C B A A B C C B A A B B A A A A B B A A B C C B A A B C D D C B A A B C D E D C B A	<pre> #include<stdio.h> #include<conio.h> main() { int i,j,k,sp=-1,a; clrscr(); for(i=5;i>=1;i--) { for(j=1;j<=i;j++) { printf("%2c",j+64); } for(k=1;k<=sp;k++) { printf(" "); } sp+=2; if(i==5) a=4; else a=i; for(j=a;j>=1;j--) { printf("%2c",j+64); } printf("\n"); } sp=5; for(i=2;i<=5;i++) { for(j=1;j<=i;j++) { printf("%2c",j+64); } for(k=1;k<=sp;k++) { printf(" "); } sp-=2; if(i==5) a=4; else a=i; for(j=a;j>=1;j--) { printf("%2c",j+64); } printf("\n"); } getch(); } </pre>	

SINGLE DIMENSION NUMERIC ARRAY

72	<p>Write a c program to Accept 5 numbers in an array and display it.</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a[10],i; clrscr(); for(i=0;i<=4;i++) { </pre>
----	---

	<pre> printf("Enter Array %d Index Value :-",i); scanf("%d",&a[i]); } for(i=0;i<=4;i++) { printf("\nArray %d index Value and Value:- %d",i,a[i]); } getch(); } </pre>
73	<p>Write a c program to Accept 10 numbers in an array and display reverse order</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a[10],i; clrscr(); for(i=0;i<=9;i++) { printf("Enter Value IN ARRAY : "); scanf("%d",&a[i]); } for(i=9;i>=0;i--) { printf("\nArray Value Is :%d",a[i]); } getch(); } </pre>
74	<p>Write a c program to Accept 10 numbers in an array and display it in sorting order.</p> <pre> #include<stdio.h> #include<conio.h> main() { int a[10],i,j,ex; clrscr(); for(i=0;i<=9;i++) { printf("Enter Array %d Index Value : ",i); scanf("%d",&a[i]); } clrscr(); printf("\n Unorted Array Values \n"); for(i=0;i<=9;i++) { printf("\n%2d",a[i]); } for(i=0;i<=9;i++) { for(j=i;j<=9;j++) { if(a[i]>a[j]) { ex=a[j]; a[j]=a[i]; a[i]=ex; } } } printf("\n Sorted Array Values \n"); for(i=0;i<=9;i++) { printf("\n%2d",a[i]); } getch(); } </pre>

	<pre> } </pre>
75	<p>Write a c program to accept 10 numbers in array and display maximum number.</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a[10],i,max; clrscr(); for(i=0;i<=9;i++) { printf("Enter Value IN ARRAY : "); scanf("%d",&a[i]); } for(i=0;i<=9;i++) { printf("\nArray Value Is :%d",a[i]); if(i==0) max=a[i]; if(max<a[i]) max=a[i]; } printf("\nMaximum Value is %d",max); getch(); } </pre>
76	<p>Write a program to input 10 numbers from keyboard. Count how many numbers are greater than 50.</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a[10],i,count=0; clrscr(); for(i=0;i<=9;i++) { printf("Enter Array %d Index Value :-",i); scanf("%d",&a[i]); } for(i=0;i<=9;i++) { if(a[i]>50) count++; } printf(" %d numbers is Greater than 50",count); getch(); } </pre>
77	<p>Write a C program to Input five number in array from user and display that number is palindrome or not.</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a[10],i,ex,d,sum; clrscr(); for(i=0;i<=9;i++) { printf("Enter Array %d Element Value :-",i); scanf("%d",&a[i]); } for(i=0;i<=9;i++) { </pre>

	<pre> ex=a[i]; sum=0; while(ex!=0) { d=ex%10; sum=(sum*10)+d; ex=ex/10; } if(a[i]==sum) printf("\n%d number is Polindrom ",a[i]); else printf("\n%d number is Not Polindrom ",a[i]); } getch(); } </pre>
78	<p>Write a C program to Input five number in array from user and find that number is prime or not.</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a[10],i,ex,sum,d; clrscr(); for(i=0;i<=9;i++) { printf("Enter Array Element :- "); scanf("%d",&a[i]); } for(i=0;i<=9;i++) { d=0; for(ex=2;ex<a[i];ex++) { if(a[i]%ex==0) { d=1; break; } } if(d==0) printf("\nPrime NUmber %d",a[i]); } getch(); } </pre>
79	<p>Write a program to print following output</p> <pre> 1 1 2 1 1 3 3 1 1 4 6 4 1 1 5 10 10 5 1 </pre> <pre> #include <stdio.h> #include <conio.h> void main() { int row, p=1, sp, i, j; clrscr(); printf("Enter the number of rows: "); scanf("%d", &row); </pre>

	<pre> for (i = 0; i < row; i++) { for (sp = 1; sp <= row - i; sp++) { printf(" "); } for (j = 0; j <= i; j++) { if (j == 0 i == 0) p = 1; else p = p * (i-j+1) / j; printf("%4d", p); } printf("\n"); } getch(); } </pre>
--	---

MULTI DIMENSION NUMERIC ARRAY

80	<p>Write a C program to Accept 3X3 matrix values from user and display it</p> <pre> #include<stdio.h> #include<conio.h> main() { int a[3][3],i,j; clrscr(); printf("\nARRAY INPUT\n"); for(i=0;i<3;i++) { for(j=0;j<3;j++) { printf("Enter Array Value a[%d][%d] : ",i,j); scanf("%d",&a[i][j]); } } printf("\nARRAY DISPLAY\n"); for(i=0;i<3;i++) { for(j=0;j<3;j++) { printf("%2d",a[i][j]); } printf("\n"); } getch(); } </pre>
81	<p>Write a C program to Accept 3X3 matrix values from user and display row wise sum , column wise sum and matrix sum</p> <pre> #include<stdio.h> #include<conio.h> main() { int a[3][3],i,j,sum=0; for(i=0;i<3;i++) { for(j=0;j<3;j++) { printf("Enter Array Value a[%d][%d] : ",i,j); scanf("%d",&a[i][j]); } } } </pre>

```

        for(i=0;i<3;i++)    {
            sum=0;
            for(j=0;j<3;j++)    {
                sum+=a[i][j];
                printf("%2d",a[i][j]);
            }
            printf(" = %d\n",sum);
        }
    getch();
}

```

82 Write a C program to Accept two 3X3 matrix values from user and display Addition of both matrix

```

#include<stdio.h>
#include<conio.h>
void main() {
    int a[3][3],b[3][3],c[3][3],i,j;
    clrscr();
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("Enter 1st Array Element a[%d][%d]: ",i,j);
            scanf("%d",&a[i][j]);
        }
    }
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("Enter 2ed Array Element b[%d][%d]: ",i,j);
            scanf("%d",&b[i][j]);
        }
    }
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            c[i][j]=0;
            c[i][j]=a[i][j]+b[i][j];
        }
    }
    clrscr();
    printf("\n1st Array dispaly\n");
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("%2d ",a[i][j]);
        }
        printf("\n");
    }
    printf("\n2st Array dispaly\n");
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("%2d ",b[i][j]);
        }
        printf("\n");
    }
    printf("\nAddition of Array dispaly\n");
    for(i=0;i<3;i++)    {

```



```

        for(j=0;j<3;j++)    {
            printf("%2d ",c[i][j]);
        }
        printf("\n");
    }
    getch();
}

```

83 Write a C program to Accept two 3X3 matrix values from user and display Multiplication of both matrix

```

#include<stdio.h>
#include<conio.h>
void main() {
    int a[3][3],b[3][3],c[3][3],i,j,k;
    clrscr();
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("Enter 1st Array Element a[%d][%d]: ",i,j);
            scanf("%d",&a[i][j]);
        }
    }
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("Enter 2ed Array Element b[%d][%d]: ",i,j);
            scanf("%d",&b[i][j]);
        }
    }
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            c[i][j]=0;
            for(k=0;k<=2;k++)    {
                c[i][j]+=a[i][k]*b[k][j];
            }
        }
    }
    clrscr();
    printf("\n1st Array disply\n");
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("%2d ",a[i][j]);
        }
        printf("\n");
    }
    printf("\n2st Array disply\n");
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {
            printf("%2d ",b[i][j]);
        }
        printf("\n");
    }
    printf("\nAddition of Array disply\n");
    for(i=0;i<3;i++)    {
        for(j=0;j<3;j++)    {

```

	<pre> printf("%2d ",c[i][j]); } printf("\n"); } getch(); } </pre>
SINGLE DIMENSION STRING ARRAY	
84	<p>Write a c program to Accept name from user and display it. If user enter "ABC"</p> <p>Output A B C</p> <pre> #include<stdlib.h> #include<stdio.h> #include<conio.h> main(){ char name[25]; int i; clrscr(); printf("Enter Your Name :"); gets(name); for(i=0;name[i]!='\0';i++) { printf("\n%c",name[i]); } getch(); } </pre>
85	<p>Write a c program to read a string and print the string reverse order. If user enter "ABC"</p> <p>Output : CBA</p> <pre> #include<stdlib.h> #include<stdio.h> #include<conio.h> void main() { int i,len=0,j=0,f=0; char name[30],rev[30]; clrscr(); printf(" Enter name : "); gets(name); for(i=0;name[i]!='\0';i++) { len++; } for(i=len-1;i>=0;i--) { rev[j]=name[i]; j++; } rev[j]='\0'; printf("\n Reverse String is %s",rev); getch(); } </pre>
86	<p>Write a c program to accept name from user and count how many characters are vowel or constant? Ex. If user Enter "ABC" (Without use any function)</p> <p>OUTPUT Vowel characters are 1</p>

```

Constant characters are 2
Total characters are 3
#include<stdio.h>
#include<conio.h>
main() {
    char name[30];
    int i,count=0,v=0,c=0;
    clrscr();
    printf("Enter Name -: ");
    gets(name);
    for(i=0;name[i]!='\0';i++) {
        count++;
        if(name[i]=='a' || name[i]=='A' || name[i]=='e' || name[i]=='E' || name[i]=='i'
|| name[i]=='I' || name[i]=='o' || name[i]=='O' || name[i]=='u' || name[i]=='U' )
            v++;
        else
            c++;
    }
    printf("\n Vowel Character : %d",v);
    printf("\n Constant Character : %d",c);
    printf("\n Total Character : %d",count);
    getch();
}

```

87 Write a program to accept a string and print in reverse order and in reverse case. For example

```

INPUT : "Hello There"
OUTPUT : "EREHt OLLEh"
#include<stdlib.h>
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,len=0,j=0,f=0;
    char name[30],rev[30];
    clrscr();
    printf(" Enter name : ");
    gets(name);
    for(i=0;name[i]!='\0';i++) {
        len++;
    }
    for(i=len-1;i>=0;i--) {
        rev[j]=name[i];
        j++;
    }
    rev[j]='\0';
    for(i=0;rev[i]!='\0';i++) {
        if(name[i]>='A' && name[i]<='Z')
            printf("%c",name[i]+32);
        else if (name[i]>='a' && name[i]<='z')
            printf("%c",name[i]-32);
        else
            printf("%c",name[i]);
    }
}

```

	<pre> getch(); } </pre>
88	<p>Write a program to input a word from the keyboard . Copy each character at that word with it's ASCII code in separate line. Example : INPUT A WORD : ABCD OUTPUT :A 65 B 66 C 67 D 68</p> <pre> #include<stdlib.h> #include<stdio.h> #include<conio.h> void main(){ char name[10]; int i; clrscr(); printf("Enter Name :"); gets(name); for(i=0;name[i]!='\0';i++) { printf("\n Character %c and ASCII code %d ",name[i],name[i]); } getch(); } </pre>
89	<p>Write a program to accept string and print whether that string is palindrome or not? (Without using Any String Function) For example : MADAM</p> <pre> #include<stdio.h> #include<conio.h> #include<string.h> void main() { int i,len=0,j=0,f=0; char name[30],rev[30]; clrscr(); printf(" Enter name : "); gets(name); for(i=0;name[i]!='\0';i++) { len++; } for(i=len-1;i>=0;i--) { rev[j]=name[i]; j++; } rev[j]='\0'; for(i=0;name[i]!='\0'; i++) { if(name[i]!=rev[i]) { f=1; break; } } if(f==0) printf(" String is Polindrome "); else </pre>

	<pre> printf("String is Not Polindrome"); getch(); } </pre>
90	<p>Write a c program to read a string and print the string in the alphabetical order.</p> <pre> #include<stdlib.h> #include<stdio.h> #include<conio.h> void main() { char name[30],ch; int i,j; clrscr(); printf("Enter Name :"); gets(name); printf("UnSoterd String %s",name); for(i=0;name[i]!='\0';i++) { for(j=i;name[j]!='\0';j++) { if(name[i]>name[j]) { ch=name[i]; name[i]=name[j]; name[j]=ch; } } } printf("SORTED STRING %s",name); getch(); } </pre>
91	<p>Write a program to print following output. table, ablet, bleta, letab, etabl.</p> <pre> #include<stdlib.h> #include<stdio.h> #include<conio.h> void main() { char name[30],ch; int i,j; clrscr(); printf("Enter Name :"); gets(name); for(i=0;name[i]!='\0';i++) { for(j=i;name[j]!='\0';j++) { printf("%2c",name[j]); } for(j=0;j<i;j++) { printf("%2c",name[j]); } printf("\n"); } getch(); } </pre>
Multi DIMENSION STRING ARRAY	
92	<p>Write a c program to accept 5 students name and display it</p> <pre> #include<stdio.h> </pre>

	<pre>#include<conio.h> void main () { char name[5][30]; int i; clrscr(); for(i=0;i<=4;i++) { printf("Enter %d Student Name :",i); gets(name[i]); } for(i=0;i<=4;i++) { printf("\n%d Student Name is %s",i,name[i]); } getch(); }</pre>
--	--

93	<p>Write a c program to accept 3 students name and check and count how many vowels and constant</p> <pre>#include<stdio.h> #include<conio.h> void main () { char name[5][30]; int i,j,v=0,c=0; clrscr(); for(i=0;i<=4;i++) { printf("Enter %d Student Name :",i); gets(name[i]); } for(i=0;i<=4;i++) { for(j=0;name[i][j]!='\0';j++) { if(name[i][j]=='a' name[i][j]=='A' name[i][j]=='e' name[i][j]=='E' name[i][j]=='i' name[i][j]=='I' name[i][j]=='u' name[i][j]=='U' name[i][j]=='o' name[i][j]=='O') v++; else c++; } } printf("\n Vowel is %d",v); printf("\n Constant Is %d",c); getch(); }</pre>
----	--

BUILT IN FUNCTIONS

94	<p>Write a c program to Accept an integer number and display its square root.</p> <pre>#include<stdio.h> #include<conio.h> #include<math.h> main() { float n; clrscr(); printf("Enter Number "); scanf("%f",&n);</pre>
----	--

	<pre> printf(" \n Square root of number %f",sqrt(n)); getch(); } </pre>
95	<p>Write a c program to accept base and exp. Value from user and display base^exp. ($2^3=8$)</p> <pre> #include<stdio.h> #include<conio.h> #include<math.h> main() { double b,r,a; clrscr(); printf("Enter Base value : "); scanf("%lf",&b); printf("\n Enter Rest value: "); scanf("%lf",&r); a=pow(b,r); printf(" \n Base %.lf^%.lf rest = %.lf",b,r,a); getch(); } </pre>
96	<p>Get a string from user and display length of that string.</p> <pre> #include<stdio.h> #include<conio.h> #include<string.h> main() { char st[30]; int len; clrscr(); printf("Enter String Value "); gets(st); printf(" The Length Of String is %d",strlen(st)); getch(); } </pre>
97	<p>Get a string from user and copy it in another variable.</p> <pre> #include<stdio.h> #include<conio.h> #include<string.h> main() { char st[30],cp[30]; int len; clrscr(); printf("Enter String Value "); gets(st); strcpy(cp,st); printf(" String is %s",cp); getch(); } </pre>
98	<p>Get two strings from user and compare whether both are same or not.</p> <pre> #include<stdio.h> #include<conio.h> #include<string.h> main(){ char st1[30],st2[30]; </pre>

	<pre> int len; clrscr(); printf("Enter 1st String Value "); gets(st1); printf("Enter 2nd String Value "); gets(st2); if(strcmp(st1,st2)==0) printf("BOTH STRINGS ARE EQUAL"); else printf("BOTH STRINGS ARE NOT EQUAL"); getch(); } </pre>
USER DEFINE FUNCTION	
99	<p>Write a UDF without arguments and without return type.(</p> <pre> #include<stdio.h> #include<conio.h> void addition(); void main() { addition(); } void addition() { int a,b,c; clrscr(); printf("Enter 1st Number "); scanf("%d",&a); printf("Enter 2nd Number "); scanf("%d",&b); c=a+b; printf("\n Addition Is %d",c); getch(); } </pre>
100	<p>Write a UDF without arguments and with return type.</p> <pre> #include<stdio.h> #include<conio.h> int addition(); void main() { int c; c=addition(); printf("\n Addition Is %d",c); getch(); } int addition() { clrscr(); printf("Enter 1st Number "); scanf("%d",&a); printf("Enter 2nd Number "); scanf("%d",&b); return(a+b); } </pre>
101	<p>Write a UDF with arguments and without return type.</p> <pre> #include<stdio.h> </pre>

	<pre> #include<conio.h> void addition(int, int); void main() { int a,b,c; clrscr(); printf("Enter 1st Number "); scanf("%d",&a); printf("Enter 2nd Number "); scanf("%d",&b); addition(a,b); getch(); } void addition(int a, int b) { int c; c=a+b; printf("\n Addition Is %d",c); } </pre>
102	<p>Write a UDF with arguments and with return type.</p> <pre> #include<stdio.h> #include<conio.h> int addition(int,int); void main() { int a,b,c; clrscr(); printf("Enter 1st Number "); scanf("%d",&a); printf("Enter 2nd Number "); scanf("%d",&b); c=addition(a,b); printf("\n Addition Is %d",c); getch(); } int addition() { return(a+b); } </pre>
103	<p>Create a user define function named fact which accept one argument (of integer type) and return the factorial of given number.</p> <pre> #include<stdio.h> #include<conio.h> int fact(int); void main() { int n,rec; clrscr(); printf("Enter Number -: "); scanf("%d",&n); rec=fact(n); printf("\n Factorial Is %d",rec); getch(); } int fact(int a) { int i,f=1; for(i=1;i<=a;i++){ </pre>

	<pre> f*=i; return f; } </pre>
104	<p>Create a user define function named avg which pass array as argument (of integer type) and return its average value.</p> <pre> #include<stdio.h> #include<conio.h> void avg(int [],int); // UDF void main() { int a[10],i; clrscr(); for(i=0;i<=9;i++) { printf("Enter Array %d Index Value : ",i); scanf("%d",&a[i]); } avg(a,9); // UDF CALL getch(); } void avg(int z[],int n) { // UDF int i,sum=0; float avg; printf("\n Array Values \n"); for(i=0;i<=n;i++) { printf("\n%2d",z[i]); sum+=z[i]; } Avg = (float)sum/n; printf("\n Array Average is %f",avg); } </pre>
105	<p>Create a user define function named prime which accept one argument (of integer type) and display that the no is prime or not.</p> <pre> #include<stdio.h> #include<conio.h> void prime(int); void main() { int a; clrscr(); printf("Enter Array Element :- "); scanf("%d",&a); prime(a); getch(); } void prime(int a) { int ex,d=0; for(ex=2;ex<a;ex++){ if(a%ex==0) { d=1; break; } } } </pre>

	<pre> } if(d==0) printf("\nPrime NUmber %d",a); } } </pre>
106	<p>Write a program to find out factorial of entered values using recursive function.</p> <pre> #include<stdio.h> #include<conio.h> int fact(int); void main() { int n,rec; clrscr(); printf("Enter Number -: "); scanf("%d",&n); rec=fact(n); printf("\n Factorial Is %d",rec); getch(); } int fact(int a) { int f; if(a==1) return 1; else f=a*fact(a-1); return f; } </pre>
107	<p>Write a recursive function to generate a Fibonacci series.</p> <pre> #include<stdio.h> #include<conio.h> int Fibonacci(int); void main() { int n, i = 0, c; clrscr(); printf("Enter Number Of Step to Print Fibonacci series:"); scanf("%d",&n); for (i = 0 ; i < n ; i++) { printf("%d\n", Fibonacci(i)); } getch(); } int Fibonacci(int n) { if (n == 0) return 0; else if (n == 1) return 1; else return (Fibonacci(n-1)+Fibonacci(n-2)); } </pre>
108	<p>Write a program to enter 10 values in single dimensional array and arrange it in ascending order using UDF.</p> <pre> #include<stdio.h> </pre>

```

#include<conio.h>
void sort(int [],int );
void main() {
    int a[10],i;
    clrscr();
    for(i=0;i<=9;i++)    {
        printf("Enter Array %d Index Value : ",i);
        scanf("%d",&a[i]);
    }
    clrscr();
    printf("\n Unorted Array Values \n");
    for(i=0;i<=9;i++)    {
        printf("\n%2d",a[i]);
    }
    sort(a,9);
    getch();
}
void sort(int a[],int n) {
    int i,j,ex;
    for(i=0;i<=n;i++)    {
        for(j=i;j<=n;j++)    {
            if(a[i]>a[j])    {
                ex=a[j];
                a[j]=a[i];
                a[i]=ex;
            }
        }
    }
    printf("\n Sorted Array Values \n");
    for(i=0;i<=9;i++)    {
        printf("\n%2d",a[i]);
    }
}

```

109 Enter a sting. Write a program to display it in capital letters using UDF & pointer.

```

#include<stdlib.h>
#include<stdio.h>
#include<conio.h>
void capital(char *);
void main(){
    char name[25];
    clrscr();
    printf("Enter Your Name :");
    gets(name);
    capital(name);
    getch();
}
void capital(char *p) {
    int i;
    while(*p!='\0')    {
        if(*p >='a' && *p <= 'z')
            printf("%c",*p-32);
        else

```

	<pre> printf("%c",*p); p++; } } } </pre>
ARRAY With UDF	
110	<p>Write a program to pass single dimensional Array elements to a function. (N.A.N.R.)</p> <pre> #include<stdio.h> #include<conio.h> void display(int [], int); // UDF declare void main() { int a[10],i; clrscr(); for(i=0;i<=9;i++) { printf("Enter Array %d Index Value :-",i); scanf("%d",&a[i]); } display(a,9); // UDF CALL getch(); } void display(int x[], int s) // UDF { int i; for(i=0;i<=s;i++) { printf("\nArray %d index Value %u Memory location and Value:- %d",i,&x[i],x[i]); } } </pre>
111	<p>Write a program to pass entire single dimensional Array to a function and display sum of array element (W.A.W.R.)</p> <pre> #include<stdio.h> #include<conio.h> int display(int [],int); // UDF void main() { int a[10],i,sum; clrscr(); for(i=0;i<=9;i++) { printf("Enter Array %d Index Value : ",i); scanf("%d",&a[i]); } sum=display(a,9); // UDF CALL printf("\n Array sum is %d",sum); getch(); } int display(int z[],int n) // UDF { int i,sum=0; printf("\n Array Values \n"); for(i=0;i<=n;i++) { printf("\n%2d",z[i]); sum+=z[i]; } return(sum); } </pre>

	<pre> } </pre>
112	<p>Write a program to pass 2 dimensional Array to a function. (N.A.N.R.)</p> <pre> #include<stdio.h> #include<conio.h> void display(int [3][3],int ,int); // UDF DECLARE void main() { int a[3][3],i,j; clrscr(); for(i=0;i<3;i++) { // VALUE INSERT for(j=0;j<3;j++) { printf("Enter The Number :- "); scanf("%d",&a[i][j]); } } display(a,3,3); // UDF CALL getch(); } void display(int z[3][3],int x,int y) // UDF { int i,j; for(i=0;i<x;i++) { for(j=0;j<y;j++) { printf("%2d",z[i][j]); } printf("\n"); } } </pre>
113	<p>Write a program to pass 2 dimensional Array to a function and display array and row wise sum.(W.A.N.R.)</p> <pre> #include<stdio.h> #include<conio.h> void display(int [3][3],int,int); main() { int a[3][3],i,j; clrscr(); for(i=0;i<3;i++) { for(j=0;j<3;j++) { printf("Enter Array Value a[%d][%d] : ",i,j); scanf("%d",&a[i][j]); } } display(a,3,3); getch(); } void display(int z[3][3],int r,int c) { int i,j,sum=0; for(i=0;i<3;i++) { sum=0; for(j=0;j<3;j++) { sum+=z[i][j]; printf("%2d",z[i][j]); } } } </pre>

```

        printf(" = %d\n",sum);
    }
}

```

STRUCTURE

- 114 Create a structure named student that have member variable roll no, name, m1, m2, m3, sum, average, and grade. Program ask for roll no, name, m1, m2, m3 and calculate sum, average and grade.

RollNo	Name	M1	M2	M3	Total	Percentage	Grade
-	-	-	-	-	-	-	-

```

#include<stdio.h>
#include<conio.h>
struct student {
    int rno,m1,m2,m3,m4,total;
    float per;
    char name[30];
}s1;
void main() {
    clrscr();
    printf("Enter Roll no:- ");
    scanf("%d",&s1.rno);
    printf("Enter Name :- ");
    fflush();
    gets(s1.name);
    printf("Enter Mark 1 :-");
    scanf("%d",&s1.m1);
    printf("Enter Mark 2 :-");
    scanf("%d",&s1.m2);
    printf("Enter Mark 3 :-");
    scanf("%d",&s1.m3);
    printf("Enter Mark 4 :-");
    scanf("%d",&s1.m4);
    printf("\nRoll No is :- %d",s1.rno);
    printf("\nName is :- %s",s1.name);
    printf("\nMark 1 is :- %d",s1.m1);
    printf("\nMark 2 is :- %d",s1.m2);
    printf("\nMark 3 is :- %d",s1.m3);
    printf("\nMark 4 is :- %d",s1.m4);
    if((s1.m1>=0 && s1.m1<=100)&&(s1.m2>=0 && s1.m2<=100)&&
        (s1.m3>=0 && s1.m3<=100)&&(s1.m4>=0 && s1.m4<=100))
    {
        s1.total = s1.m1+s1.m2+s1.m3+s1.m4;
        if(s1.m1>=40 && s1.m2>=40 && s1.m3>=40 && s1.m4>=40)
        {
            s1.per =(float)s1.total/4;
            printf("\nTotal    : %d",s1.total);
            printf("\nResult    : PASS");
            printf("\nPercentage : %.2f",s1.per);
            if(s1.per>=91)
                printf("\nGrade  : A1");
            else if(s1.per>=81)
                printf("\nGrade  : A2");

```

```

else if(s1.per>=71)
    printf("\nGrade : B1");
else if(s1.per>=61)
    printf("\nGrade : B2");
else if(s1.per>=51)
    printf("\nGrade : C1");
else if(s1.per>=41)
    printf("\nGrade : C2");
else
    printf("\nGrade : D");
    }
else
    {
    printf("\nTotal : %d",s1.total);
    printf("\nResult : FAIL");
    printf("\nPercantege : ****");
    printf("\nGrade : E");
    }

}
else
{
    printf("Plz Marks Input Between 0 to 100");
}
getch();
}

```

115 Write a program to calculate & print following output.

XYZ Sales Agency, Rajkot.

Stock Report

Item Code	Sales	Purchase	Rate	Stock	Investment
101	250	300	8.50	50	425.00
111	400	720	10.50	320	3200.00
Net Investment:					3625.00

```
#include<Stdio.h>
```

```
#include<conio.h>
```

```
struct stock
```

```
{
```

```
    int itm,sal,pur,st;
```

```
    float rate,inve;
```

```
};
```

```
void main()
```

```
{
```

```
    struct stock s[10];
```

```
    float total=0.0f,d=0.0f;
```

```
    int i,n;
```

```
    clrscr();
```

```
    printf(" How mnay Element add in Stock ");
```

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

```
    for(i=0;i<n;i++)
```

```
{
```



```

printf("Enter Item Code ");
scanf("%d",&s[i].itm);

printf("Enter Purchase Item ");
scanf("%d",&s[i].pur);

printf("Enter Sales :");
scanf("%d",&s[i].sal);

printf("Enter Rate ");
fflush(stdin);
scanf("%f",&d);
s[i].rate=d;

s[i].st=s[i].pur-s[i].sal;
s[i].inve=(float)s[i].st*s[i].rate;
}
clrscr();
printf("\nItemcode\tPurchase\tSales\tRate\tStock\tInvesrtment");
for(i=0;i<n;i++)
{
printf("\n%d\t\t%d\t\t%d\t\t%f\t\t%d\t\t%f",
s[i].itm,s[i].pur,s[i].sal,s[i].rate,s[i].st,s[i].inve);
total=total+s[i].inve;
}
printf("\n Netc Investment %f",total);
getch();
}

```

116 To store srno, name, age, sex and total marks obtained by 20 students in an array of structures and then print the reporting in following manner.

Sr no	Name	Age	Sex	Total
01	XYZ	-	-	-
02	ABC	-	-	-
-	-	-	-	-
-	-	-	-	-
20	PQR	-	-	-

```

#include<stdio.h>
#include<conio.h>
struct student {
    int srno,total,age;
    char name[30],sex;
}s1[20];
main() {
    int i;
    clrscr();
    for(i=0;i<20;i++) {
        printf("Enter Srno :");
        scanf("%d",&s1[i].srno);
        printf("Enter Name :");
        fflush();
        gets(s1[i].name);
    }
}

```

```

printf("Enter Age :");
scanf("%d",&s1[i].age);
printf("Enter Sex :");
flushall();
s1[i].sex=getchar();
printf("Enter Total Marks :");
scanf("%d",&s1[i].total);
}
clrscr();
printf("\nSrno\tName\tAge\tSex\tTotal Marks");
for(i=0;i<20;i++) {
printf("\n%d\t%s\t%d\t%c\t%d",s1[i].srno,s1[i].name,s1[i].age,s1[i].sex,s1[i].total);
}
getch();
}

```

117 Create a structure named EMP that have member variables employee no, employee name, basic salary, DA, HRA, medical and Gross Salary.

Basic Salary		Up to Rs.4,000	Up to Rs.8,000	Up to Rs.12,000	Beyond Rs12,000
Rate of DA(%)		14%	12%	10%	8%
HRA		1500	1800	10% of Basic	15% of Basic
Medical	Male	1500	2500	5000	10000
	Female	2000	3500	7000	12000

```

#include<stdio.h>
#include<conio.h>
struct emp {
    int eno,med;
    char ename[30],gen;
    float bs,da,gs,hra;
};
void main() {
    clrscr();
    printf("Enter Emp No ");
    scanf("%d",&e.eno);
    printf("Enter Emp Name ");
    fflush(stdin);
    gets(e.ename);
    printf("Enter Gender ");
    e.gen=getchar();
    printf("Enter Basic Salary :");
    scanf("%f",&e.bs);
    if(e.bs>=0 && e.bs<=4000) {
        e.da=e.bs*0.14;
        e.hra=1500.0;
        if(e.gen=='m' || e.gen=='M')
            e.med=1500;
        else
            e.med=2000;
    }
    else if(e.bs>4000 && e.bs<=8000) {

```

```

        e.da=e.bs*0.12;
        e.hra=1800.0;
        if(e.gen=='m' || e.gen=='M')
            e.med=2500;
        else
            e.med=3500;
    }
    else if(e.bs>8000 && e.bs<=12000)    {
        e.da=e.bs*0.1;
        e.hra=e.bs*0.1;
        if(e.gen=='m' || e.gen=='M')
            e.med=5000;
        else
            e.med=7000;
    }
    else    {
        e.da=e.bs*0.08;
        e.hra=e.bs*0.15;
        if(e.gen=='m' || e.gen=='M')
            e.med=10000;
        else
            e.med=12000;
    }
    e.gs=e.bs+e.da+e.hra+e.med;
    printf("\n Emp No :%d",e.eno);
    printf("\n Emp Name : %d",e.ename);
    printf("\n Emp Gender : %c",e.gen);
    printf("\n Emp Basic Salary : %f",e.bs);
    printf("\n Emp DA :%f",e.da);
    printf("\n Emp HRA %f",e.hra);
    printf("\n Emp MEDical %d",e.med);
    printf("\n Emp Gross Salary %f",e.gs);
    getch();
}

```

ARRAY With UDF and Pointer

118 Write a program to pass single dimensional array using pointer

```

#include<stdio.h>
#include<conio.h>
void array(int *,int);
void main(){

    int a[10],i;
    clrscr();
    for(i=0;i<=9;i++)    {
        printf("Enter Array Value %d : ",i+1);
        scanf("%d",&a[i]);
    }
    array(&a[0],10);
    getch();
}
array(int *b,int x) {

```

	<pre> int i; for(i=0;i<x;i++) { printf("\n%d",*b); b++; } } </pre>
119	<p>Write a program to pass 2 dimensional array using pointer</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a[3][3],i,j; clrscr(); for(i=0;i<3;i++) { for(j=0;j<3;j++) { printf("Enter The Number :- "); scanf("%d",&a[i][j]); } } display(a,3,3); getch(); } display(int *a,int x,int y){ int i,j; for(i=0;i<x;i++) { for(j=0;j<y;j++) { printf("%2d",*(a+j)+i); } printf("\n"); } } </pre>
POINTER	
120	<p>Write a program to swap two values using UDF and pointer.(Call by Reference).</p> <pre> #include<stdio.h> #include<conio.h> void main() { int a,b; clrscr(); printf("Enter Number 1 : "); scanf("%d",&a); printf("Enter Number 2 : "); scanf("%d",&b); printf("\n Before swap \n"); printf("\n1st Values Is %d",a); printf("\n2nd Values is %d",b); swap(&a,&b); printf("\n After swap \n"); printf("\n1st Values Is %d",a); printf("\n2nd Values is %d",b); getch(); } swap(int *p,int *q) { </pre>

	<pre> int c; c=*p; *p=*q; *q=c; } </pre>
121	<p>W. A C Program to create student structure like rno, m1, m2, m3 and count total and percentage. to accept and display values using pointer</p> <pre> #include<stdio.h> #include<conio.h> struct student { int rno,m1,m2,m3,total; float per; char name[30]; }; void main() { struct student *x; clrscr(); printf("Enter Roll no:- "); scanf("%d",&(*x).rno); printf("Enter Name :- "); flushall(); gets((*x).name); printf("Enter Mark 1 :-"); scanf("%d",&(*x).m1); printf("Enter Mark 2 :-"); scanf("%d",&(*x).m2); printf("Enter Mark 3 :-"); scanf("%d",&(*x).m3); x->total = x->m1+x->m2+x->m3; x->per=x->total/3; printf("\nRoll No is :- %d",x->rno); printf("\nName is :- %s",x->name); printf("\nMark 1 is :- %d",x->m1); printf("\nMark 2 is :- %d",x->m2); printf("\nMark 3 is :- %d",x->m3); printf("\nTotal is :- %d",x->total); printf("\nPercentage is :- %0.2f ",x->per); getch(); } </pre>

Nested Structure

122	<p>write a program to create a college and also create students structure in college structure using nested structure and display it</p> <pre> #include<stdio.h> #include<conio.h> struct college { char cname[30]; int ccode; struct student { int rno,m1,m2,m3,total; </pre>
-----	--

```

        char name[30];
        float per;
    }s1;
}c1;
void main() {
    clrscr();
    printf("Enter College name ");
    gets(c1.cname);
    printf("Enter College code");
    scanf("%d",&c1.ccode);
    printf("Enter Roll no:- ");
    scanf("%d",&c1.s1.rno);
    printf("Enter Name :- ");
    fflush();
    gets(c1.s1.name);
    printf("Enter Mark 1 :-");
    scanf("%d",&c1.s1.m1);
    printf("Enter Mark 2 :-");
    scanf("%d",&c1.s1.m2);
    printf("Enter Mark 3 :-");
    scanf("%d",&c1.s1.m3);

    c1.s1.total = c1.s1.m1+c1.s1.m2+c1.s1.m3;
    c1.s1.per=c1.s1.total/3.0;

    printf("\nCollege name %s",c1.cname);
    printf("\nCollege code %d",c1.ccode);
    printf("\nRoll no:- %d",c1.s1.rno);
    printf("\n Name :- %s",c1.s1.name);
    printf("\n Mark 1 :-%d",c1.s1.m1);
    printf("\n Mark 2 :-%d",c1.s1.m2);
    printf("\n Mark 3 :-%d",c1.s1.m3);
    printf("\n Total  %d",c1.s1.total);
    printf("\n Per %f",c1.s1.per);
}

```

UNION

```

123 #include<stdio.h>
#include<conio.h>
Void main() {
    union abc    {
        int a;
        float b;
        char name;
    };
    union abc x;
    clrscr();
    printf("Enter No : ");
    scanf("%d",&x.a);
    fflush();
    printf("Enter name : ");
    x.name=getchar();

```

	<pre> printf("\nEnter rate "); scanf("%f",&x.b); printf("\nOUTPUT\n"); flushall(); printf("No is %d\n",x.a); putchar(x.name); printf("\nrate is %f",x.b); getch(); } </pre>
File Handling	
124	<p>Write a program to copy the content of one file into another file using character handling.</p> <pre> #include<stdio.h> #include<conio.h> void main() { FILE *fp1, *fp2; char *path1,*path2,ch; clrscr(); printf("\nEnter Full path of a Source Text File "); gets(path1); printf("\nEnter Full path of a destination Text File "); gets(path2); fp1=fopen(path1,"r"); fp2=fopen(path2,"w"); if(fp1==NULL) { printf("\n UNABLE OPEN a FILE1 "); exit(0); } else if(fp2==NULL) { printf("\n UNABLE OPEN a FILE2 "); exit(0); } else { ch=fgetc(fp1); while(ch!=EOF) { fputc(ch,fp2); ch=fgetc(fp1); } fclose(fp1); fclose(fp2); getch(); } } </pre>
125	<p>Write a program to open a file TEST.TXT and read from the file and print how many characters, digit, space, special symbol and lines in the file.</p> <pre> #include<stdio.h> #include<conio.h> void main() { FILE *fp; char ch, *str; int c=0,l=0,s=0,d=0,sp=0; printf("\nEnter Full path of a Text File "); </pre>

	<pre> gets(str); fp=fopen(str,"r"); if(fp==NULL) { printf("Unable open a file"); exit(0); } ch=fgetc(fp); while(ch!=EOF) { if(iscntrl(ch)) l++; else if(isalpha(ch)) c++; else if(isdigit(ch)) d++; else if(isspace(ch)) sp++; else s++; ch=fgetc(fp); } printf("\n Total Characters are %d",c); printf("\n Total Digit are %d",d); printf("\n Total space are %d",sp); printf("\n Total Symbol are %d",s); printf("\n Total Lines are %d",l); fclose(fp); getch(); } </pre>
126	<p>Write a program using command line arguments.</p> <pre> #include<stdio.h> #include<conio.h> void main(int argc, char *argv[]) { int i; clrscr(); for(i=0;i<argc;i++) { printf("\nValue of i = %d - ",i); puts(argv[i]); } getch(); } </pre>
127	<p>Write a program to accept number from command line and check that number is Armstrong or not</p> <pre> #include<stdio.h> #include<conio.h> void main(int argc, char *argv[]) { int n,i,ex,a,sum=0; clrscr(); if(argc > 2) { printf("only one argument"); exit(0); } puts(argv[1]); } </pre>


```

n=atoi(argv[1]);
printf("Number is %d",n);
ex=n;
while(n!=0) {
    a=n%10;
    sum+=a*a*a;
    n=n/10;

}
if(ex==sum)
    printf("\nNumber is Armstrong");
else
    printf("\n Number is not Armstrong");
getch();
}

```

128 Write a program to accept two files name from user and copy file1 to file2 using command
lind

```

#include<stdio.h>
#include<conio.h>
void main(int arc, char *arv[] ) {
    FILE *fp1, *fp2;
    char ch;
    clrscr();
    if (arc==3) {
        fp1=fopen(arv[1],"r");
        fp2=fopen(arv[2],"w");
        if(fp1==NULL) {
            printf("\n UNABLE OPEN a FILE1 ");
            exit(0);
        }
        else if(fp2==NULL) {
            printf("\n UNABLE OPEN a FILE2 ");
            exit(0);
        }
        else {
            ch=fgetc(fp1);
            while(ch!=EOF) {
                fputc(ch,fp2);
                ch=fgetc(fp1);
            }
        }
        fclose(fp1);
        fclose(fp2);
    }
    Else {
        printf("Invalid Arg");
    }
    getch();
}

```