C Programming

(Problem & Solution)

1. Write a program that prints your name.

#include<stdio.h>   
#include<conio.h>   
void main()

{

clrscr();

printf(“Md͘ Shohidul Islam”);   
getch();

}

2. An integer variable n contains 5. Write a program that print the value of n.

#include<stdio.h>

#include<conio.h> void main()

{

int n;

clrscr();   
n=5;

printf(“%d”,n);   
getch();

}

3. Write a program that read and display an integer number.

#include<stdio.h>

#include<conio.h> void main()

{

int n;

clrscr();

scanf(“%d”, &n);   
printf(“%d”, n);   
getch();

}

4. Write a program that read and display an integer number.

#include<stdio.h>   
#include<conio.h>   
void main()

{

int n;

clrscr();

printf(“Enter any integer number:”); scanf(“%d”, &n);

printf(“%d”, n);   
getch();

}

5. Write a program that read and display floating point number.

#include<stdio.h>

#include<conio.h> void main()

{

float n;   
clrscr();

printf(“Enter any floating point number:”); scanf(“%f”, &n);

printf(“%f”, n);   
getch();

}

6. Write a program that read and display long number.

#include<stdio.h>

#include<conio.h> void main()

{

long n;   
clrscr();

printf(“Enter any long number:”); scanf(“%ld”, &n);

printf(“%ld”, n);   
getch();

}

7. Write a program that read and display double number.

#include<stdio.h>   
#include<conio.h>   
void main()

{

double n;   
clrscr();

printf(“Enter any double number:”); scanf(“%lf”, &n);

printf(“%lf”, n);   
getch();

}

8. Write a program that read and display any character.

#include<stdio.h>

#include<conio.h> void main()

{

char n;   
clrscr();

printf(“Enter any character:”); scanf(“%c”, &n);

printf(“%c”, n);   
getch();

}

9. Write a program that read ASCII valu and display equivalent character.

#include<stdio.h>

#include<conio.h> void main()

{

char n;   
clrscr();

printf(“Enter any SCII value:”); scanf(“%d”, &n);

printf(“%c”, n);   
getch();

}

10. Write a program that read any character and display equivalent ASCII value.

#include<stdio.h>

#include<conio.h> void main()

{

char n;   
clrscr();

printf(“Enter any character:”); scanf(“%c”, &n);

printf(“%d”, n);   
getch();

}

11. Write a program that read any lower case character and display in upper case.

#include<stdio.h>

#include<conio.h> void main()

{

char n;   
clrscr();

printf(“Enter any lower case character:”); scanf(“%c”, &n);

printf(“%c”, n-32);   
getch();

}

12. Write a program that read any upper case character and display in lower case.

#include<stdio.h>

#include<conio.h> void main()

{

char n;   
clrscr();

printf(“Enter any upper case character:”); scanf(“%c”, &n);

printf(“%c”, n+32);   
getch();

}

13. Write a program that read any decimal number and display equivalent octal number.

#include<stdio.h>

#include<conio.h> void main()

{

int n;   
clrscr();

printf(“Enter any decimal number:”); scanf(“%d”, &n);

printf(“Equivalent octal number is %o͘”, n);   
getch();

}

14. Write a program that read any decimal number and display equivalent hexadecimal number.

#include<stdio.h>

#include<conio.h> void main()

{

int n;   
clrscr();

printf(“Enter any decimal number:”); scanf(“%d”, &n);

printf(“Equivalent hexadecimal number is %x͘”, n);   
getch();

}

15. Write a program that read any decimal number and display equivalent hexadecimal number.

#include<stdio.h>

#include<conio.h> void main()

{

int n;   
clrscr();

printf(“Enter any decimal number:”); scanf(“%d”, &n);

printf(“Equivalent hexadecimal number is %X͘”, n);   
getch();

}

16. Write a program that read any octal number and display equivalent decimal number.

#include<stdio.h>

#include<conio.h> void main()

{

int n;   
clrscr();

printf(“Enter any octal number:”); scanf(“%o”, &n);

printf(“Equivalent decimal number is %d͘”, n);   
getch();

}

17. Write a program that read any hexadecimal number and display equivalent decimal number.

#include<stdio.h>

#include<conio.h> void main()

{

int n;   
clrscr();

printf(“Enter any hexadecimal number:”); scanf(“%x”, &n);

printf(“Equivalent decimal number is %d”, n);   
getch();

}

18. Write a program that read and display your name.

#include<stdio.h>

#include<conio.h> void main()

{

char st[30];   
clrscr();

printf(“Enter your name:”); scanf(‘%s’,st);

printf(“Your name is %s”, st);   
getch();

}

19. Write a program that read and display a line of text.

#include<stdio.h>

#include<conio.h> void main()

{

char st[100];   
clrscr();

printf(“Enter any line of text:”);   
gets(st);

printf(“The line of text is %s”, st);   
getch();

}

20. Write a program that read any date in the format DD/MM/YYYY and display day, month and   
 year separately.

#include<stdio.h>   
#include<conio.h>   
void main()

{

int d, m, y;   
clrscr();

printf(“Enter any date in format(DD/MM/YYYY):”); scanf(“%d/%d/%d”, &d, &m, &y);

printf(“\nDay=%d\nMonth=%d\nYear=%d”,d,m,y);   
getch();

}

21. Write a program that read any date in the format DD-MM-YYYY and display day, month and year   
 separately.

#include<stdio.h>   
#include<conio.h>   
void main()

{

int d, m, y;   
clrscr();

printf(“Enter any date in format(DD-MM-YYYY):”); scanf(“%d-%d-%d”, &d, &m, &y);

printf(“\nDay=%d\nMonth=%d\nYear=%d”,d,m,y);   
getch();

}

22. Write a program that read any date in the entire following format:

i) DD-MM-YYYY

ii) DD/MM/YYYY

iii) DD MM YYYY

iv) DD,MM,YYYY

and displays day, month and year separately.

#include<stdio.h>

#include<conio.h> void main()

{

int d, m, y;   
clrscr();

printf(“Enter any date in format(DD MM YYYY):”);   
scanf(“%d%\*c%c%\*c%d”, &d, &m, &y);   
printf(“\nDay=%d\nMonth=%d\nYear=%d”,d,m,y);   
getch();

}

Math.h

1. Write a program that read any integer number and display absolute value.

#include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int n;

clrscr();

printf(“Enter any integer number :”); scanf(“%d”, &n);

printf(“abs(%d)=%d”, n, abs(n));   
getch();

}

2. Write a program that read any angle t and display sin(t).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int t;

clrscr();

printf(“Enter any angle:”); scanf(“%d”, &t);

printf(“sin(%d)=%͘2f”, t, sin(t\*M\_PI/180));   
getch();

}

3. Write a program that read any angle t and display cos(t).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int t;

clrscr();

printf(“Enter any angle:”); scanf(“%d”, &t);

printf(“cos(%d)=%͘2f”, t, cos(t\*M\_PI/180));   
getch();

}

4. Write a program that read any angle t and display tan(t).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int t;

clrscr();

printf(“Enter any angle:”); scanf(“%d”, &t);

printf(“tan(%d)=%͘2f”, t, tan(t\*M\_PI/180));   
getch();

}

5. Write a program that read any angle t and display cot(t).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int t;

clrscr();

printf(“Enter any angle:”); scanf(“%d”, &t);

printf(“cot(%d)=%͘2f”, t, 1/tan(t\*M\_PI/180));   
getch();

}

6. Write a program that read any angle t and display sec(t).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int t;

clrscr();

printf(“Enter any angle:”); scanf(“%d”, &t);

printf(“sec(%d)=%͘2f”, t, 1/cos(t\*M\_PI/180));   
getch();

}

7. Write a program that read any angle t and display cosec(t).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int t;

clrscr();

printf(“Enter any angle:”); scanf(“%d”, &t);

printf(“cosec(%d)=%͘2f”, t, 1/sin(t\*M\_PI/180));   
getch();

}

8. Write a program that read a value n and display sin inverse(n)   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

float n;   
clrscr();

printf(“Enter any value:”); scanf(“%d”, &n);

printf(“sin inverse(%͘2f)=%͘2f”, n, asin(n)\*180/M\_PI);   
getch();

}

9. Write a program that read a value n and display cos inverse(n)   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

float n;   
clrscr();

printf(“Enter any value:”); scanf(“%d”, &n);

printf(“cos inverse(%͘2f)=%͘2f”, n, acos(n)\*180/M\_PI);   
getch();

}

10. Write a program that read a value n and display tan inverse(n).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

float n;   
clrscr();

printf(“Enter any value:”); scanf(“%d”, &n);

printf(“tan inverse(%͘2f)=%͘2f”, n, atan(n)\*180/M\_PI);   
getch();

}

11. Write a program that read a value n and display cot inverse(n).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

float n;   
clrscr();

printf(“Enter any value:”); scanf(“%d”, &n);

printf(“cot inverse(%͘2f)=%͘2f”, n, atan(1͘0/n)\*180/M\_PI);   
getch();

}

12. Write a program that read a value n and display sec inverse(n).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

float n;   
clrscr();

printf(“Enter any value:”); scanf(“%d”, &n);

printf(“sec inverse(%͘2f)=%͘2f”, n, acos(1͘0/n)\*180/M\_PI);   
getch();

}

13. Write a program that read a value n and display cosec inverse(n).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

float n;   
clrscr();

printf(“Enter any value:”); scanf(“%d”, &n);

printf(“cosec inverse(%͘2f)=%͘2f”, n, asin(1͘0/n)\*180/M\_PI);   
getch();

}

14. Write a program that read two number(x,y) and display the value xy .   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

int x, y;   
clrscr();

printf(“x = ”);

scanf(“%d”, &x);   
printf(“y = ”);   
scanf(“%d”, &y);

printf(“%d to the power %d=%͘2f”, x,y,pow(x,y));   
getch();

}

15. Write a program that read any numbers and display its square root.   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

long n;   
clrscr();

printf(“Enter any number: ”); scanf(“%ld”, &n);

printf(“Square root of %ld=%ld”, n,(long)sqrt(n));   
getch();

}

16. Write a program that read any number x and display e to the power x.   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

float x;   
clrscr();

printf(“Enter any number: ”); scanf(“%f”, &x);

printf(“e to the power %͘2f=%͘2f”, x, exp(x));   
getch();

}

17. Write a program that read any number x and display log(x).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

double x;   
clrscr();

printf(“Enter any number: ”); scanf(“%lf”, &x);

printf(“log(%͘2lf)=%͘2lf”, x, log(x));   
getch();

}

18. Write a program that read any number x and display log10(x).   
 #include<stdio.h>

#include<conio.h>   
#include<math.h>   
void main()

{

double x;   
clrscr();

printf(“Enter any number: ”); scanf(“%lf”, &x);

printf(“log10(%͘2lf)=%͘2lf”, x, log10(x));   
getch();

}

Using Conditional Operator

1. A program that read an integer & display odd or even.

#include<stdio.h>

#include<conio.h> void main()

{

int n;

clrscr();

printf("Enter any number = "); scanf("%d",&n);

printf("%s",(n%2==0)? "Even number.":"Odd number.");

getch();

}

2. A program that read two numbers & display maximum (1).

#include<stdio.h>

#include<conio.h>

void main()   
{

int x,y,m;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&x);

printf("Enter 2nd number = "); scanf("%d",&y);

m=(x>y)? x:y;

printf("Maximum number = %d",m); getch();

}

3. A program that read two numbers & display maximum (2).

#include<stdio.h>

#include<conio.h> void main()

{

int x,y,m;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&x);

printf("Enter 2nd number = "); scanf("%d",&y);

printf("Maximum number = %d",(x>y)? x:y);

getch();

}

4. A program that read two numbers & display minimum(1).

#include<stdio.h>

#include<conio.h>

void main()

{

int x,y;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&x);

printf("Enter 2nd number = "); scanf("%d",&y);

printf("Minimum number = %d",(x<y)? x:y);

getch();

}

5. A program that read two numbers & display minimum(2).

#include<stdio.h>

#include<conio.h>

void main()

{

int x,y,m;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&x);

printf("Enter 2nd number = "); scanf("%d",&y);

m=(x<y)? x:y

printf("Minimum number = %d",m);

getch();

}

6. A Program That Read Three Numbers & Display Maximum.

#include<stdio.h>

#include<conio.h>

void main()

{

int x,y,z,m;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&x);

printf("Enter 2nd number = "); scanf("%d",&y);

printf("Enter 3rd number = "); scanf("%d",&z);

m=(x>y)? (x>z)? x:z: (y>z)? y:z;

printf("Maximum number = %d",m);

getch();

}

7. A Program That Read Three Numbers & Display Minimum.

#include<stdio.h>   
#include<conio.h>

void main()

{

int x,y,z,m;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&x);

printf("Enter 2nd number = "); scanf("%d",&y);

printf("Enter 3rd number = "); scanf("%d",&z);

m=(x<y)? (x<z)? x:z: (y<z)? y:z;

printf("Minimum number = %d",m);

getch();

}

8. A Program That Read Three Numbers & Display Medium.

#include<stdio.h>

#include<conio.h>

void main()

{

int x,y,z,m;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&x);

printf("Enter 2nd number = "); scanf("%d",&y);

printf("Enter 3rd number = "); scanf("%d",&z);

m=(x>y)? (x>z)? (y>z)? y:z:x: (y>z)? (x>z)? x:z:y; printf("Midium number = %d",m);

getch();

}

9. A Program That Read Mark & Display Pass Or Fail.

#include<stdio.h>

#include<conio.h>

void main()

{

int mark;   
clrscr();

printf("Enter Mark = ");   
scanf("%d",&mark);

printf("%s",(mark>=33)? "Pass":"Fail");

getch();

}

Switch

1. A Program That Read Digit & Display By Spelling.

#include<stdio.h>   
#include<conio.h>

void main()

{

int digit;   
clrscr();

printf("Enter any digit = "); scanf("%d",&digit);

switch(digit)

{

case 0:

printf("Zero");   
break;

case 1:

printf("One");   
break;

case 2:

printf("Two");   
break;

case 3:

printf("Three");   
break;

case 4:

printf("Four");   
break;

case 5:

printf("Five");   
break;

case 6:

printf("Six");   
break;

case 7:

printf("Seven");   
break;

case 8:

printf("Eight");   
break;

case 9:

printf("Nine");   
break;

default:

printf("Not a single, Please enter single digit");   
}

getch();   
}

2. A Program That Read Any Number & Display Equivalent Roman   
 Number.

#include<stdio.h>   
#include<conio.h>

void main()

{

int n,h,s,d,a,i; clrscr();

printf("Enter any number = "); scanf("%d",&n);

printf("Equivalent Roman number is : "); h=n/1000;

for(i=1;i<=h;i++) printf("M");

s=(n%1000)/100;

switch(s)

{

case 1:

printf("C");   
break;

case 2:

printf("CC");   
break;

case 3:

printf("CCC");   
break;

case 4:

printf("CD");   
break;

case 5:

printf("D");   
break;

case 6:

printf("DC");   
break;

case 7:

printf("DCC");   
break;

case 8:

printf("DCCC");   
break;

case 9:

printf("CM");   
break;

}

d=(n%100)/10; switch(d)

{

case 1:

printf("X");   
break;

case 2:

printf("XX");   
break;

case 3:

printf("XXX");   
break;

case 4:

printf("XL");   
break;

case 5:

printf("L");   
break;

case 6:

printf("LX");   
break;

case 7:

printf("LXX");

break;   
case 8:

printf("LXXX");   
break;

case 9:

printf("XC");   
break;

}

a=n%10;   
switch(A)   
{

case 1:

printf("I");   
break;

case 2:

printf("II");   
break;

case 3:

printf("III");   
break;

case 4:

printf("IV");   
break;

case 5:

printf("V");   
break;

case 6:

printf("VI");   
break;

case 7:

printf("VII");   
break;

case 8:

printf("VIII");   
break;

case 9:

printf("IX");   
break;

}

getch();   
}

Series

1. 1+2+3+4+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

printf("Summation = %d",s);

getch();   
}

2. 2+4+6+8+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

for(i=1;i<=n;i++) s=s+2\*i;

printf("Summation = %d",s);

getch();

}

3. 1+3+5+7+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

for(i=1;i<=n;i++) s=s+2\*i-1;

printf("Summation = %d",s);

getch();

}

4. 4+12+20+28+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

for(i=1;i<=n;i++) s=s+8\*i-4;

printf("Summation = %d",s);

getch();   
}

5. 2+5+8+11+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

for(i=1;i<=n;i++) s=s+3\*i-1;

printf("Summation = %d",s);

getch();

}

6. 1.2+2.3+3.4+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

for(i=1;i<=n;i++) s=s+i\*(i+1);

printf("Summation = %d",s);

getch();

}

7. 2.1+5.3+8.5+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+(3\*i-1)\*(2\*i+1);

printf("Summation = %d",s);

getch();   
}

8. 1.3+3.5+5.7+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+(2\*i-1)\*(2\*i+1);

printf("Summation = %d",s);

getch();

}

9. 1^2+3^2+5^2……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+(2\*i-1)\*(2\*i-1);

printf("Summation = %d",s);

getch();

}

10. 1.1^2+2.3^2+3.5^2……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,s=0;   
clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+i\*(2\*i-1)\*(2\*i-1);

printf("Summation = %d",s);

getch();   
}

11. 1.2^2+2.3^2+3.4^2……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i;

long int s=0; clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

for(i=1;i<=n;i++)   
s=s+i\*(i+1)\*(i+1);

printf("Summation = %ld",s);

getch();

}

12. 1^2.2^2+2^2.3^2+3^2.4^2……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()   
{

int n,i;

long int s=0; clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+i\*i\*(i+1)\*(i+1);

printf("Summation = %ld",s);

getch();

}

13. 1.2.3+2.3.4+3.4.5+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i;

long int s=0; clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+i\*(i+1)\*(i+2);

printf("Summation = %ld",s);

getch();

}

14. 1.3.5.7+3.5.7.9+5.7.9.11+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i;

long int s=0; clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+(2\*i-1)\*(2\*i+1)\*(2\*i+3)\*(2\*i+5);

printf("Summation = %ld",s);

getch();

}

15. 2.5.8+5.8.11+8.11.14+……….up to n’th term.

#include<stdio.h>   
#include<conio.h>

void main()

{

int n,i;

long int s=0; clrscr();

printf("Enter how many number you sum = "); scanf("%d",&n);

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

s=s+(3\*i-1)\*(3\*i+2)\*(3\*i+5);

printf("Summation = %ld",s);

getch();

}

16. 5.6.7+6.7.8+7.8.9+……….up to n’th term.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i;

long int s=0; clrscr();

printf("Enter how many number you sum = ");

scanf("%d",&n);

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

s=s+(i+4)\*(i+5)\*(i+6);

printf("Summation = %ld",s);

getch();

}

Pyramid

1.

1

1 2

1 2 3

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

{

for(j=1;j<=i;j++)   
printf("%4d",j);   
printf("\n");

}

getch();   
}

2.

1

2 2

3 3 3

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

getch();   
}

3.

1

0 0

1 1 1

#include<conio.h>

void main()   
{

int i,j,n;   
clrscr();

#include<stdio.h>

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=i;j++)   
printf("%4d",i%2);

printf("\n");   
}

getch();   
}

4.

2

3 4

4 5 6

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=i;j++) printf("%4d",i+j); printf("\n");

}

getch();   
}

5.

1

2 3

3 4 5

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

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

printf("%4d",i+j-1); printf("\n");

}

getch();   
}

6.

0

1 0

1 0 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

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

printf("%4d",(i+j)%2);

printf("\n");   
}

getch();   
}

7.

1

0 1

1 0 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

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

printf("%4d",(i+j-1)%2); printf("\n");

}

getch();   
}

8.

A

B B

C C C

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

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

printf("%4c",i+64); printf("\n");

}

getch();   
}

9.

A

A B

A B C

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

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

printf("%4c",j+64); printf("\n");

}

getch();   
}

10.

1 2 3

1 2

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

for(j=1;j<=i;j++)   
printf("%4d",j);   
printf("\n");

}

getch();   
}

11.

3 3 3

2 2

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

for(j=1;j<=i;j++)   
printf("%4d",1);   
printf("\n");

}

getch();   
}

12.

1 1 1

0 0

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

for(j=1;j<=i;j++) printf("%4d",i%2); printf("\n");

}

getch();   
}

13.

1 0 1

1 0

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

for(j=1;j<=i;j++) printf("%4d",j%2); printf("\n");

}

getch();   
}

14.

4 5 6

3 4   
2

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

for(j=1;j<=i;j++) printf("%4d",i+j); printf("\n");

}

getch();   
}

15.

3 4 5

2 3

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

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

printf("%4d",i+j-1); printf("\n");

}

getch();   
}

16.

0 1 0

1 0

0

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

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

printf("%4d",(i+j-1)%2); printf("\n");

}

getch();   
}

17.

1 0 1

0 1   
1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

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

printf("%4d",(i+j)%2); printf("\n");

}

getch();   
}

18.

C C C

B B   
A

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

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

printf("%4c",i+64); printf("\n");

}

getch();   
}

19.

A B C

A B   
A

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

for(i=n;i>=1;i--)   
{

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

printf("%4c",j+64); printf("\n");

}

getch();   
}

20.

1

1 2

1 2 3

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",j);   
printf("\n");

}

getch();   
}

21.

1

2 2

3 3 3

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

getch();   
}

22.

1

0 0

1 1 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++) printf("%4d",i%2); printf("\n");

}

getch();   
}

23.

1

1 0

1 0 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++) printf("%4d",j%2); printf("\n");

}

getch();   
}

24.

1

2 2

3 3 3

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

getch();   
}

25.

1

2 1

3 3 1

4 6 4 1

5 10 10 5 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,k,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

k=1;

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

k=k\*(i-j+1)/j;

printf("%4d",k);   
}

printf("\n");   
}

getch();   
}

26.

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

1 5 10 10 5 1

1 6 15 20 15 6 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,k,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

k=1;

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

printf("%4d",k); k=k\*(i-j)/j;

}

printf("\n");   
}

getch();   
}

27.

1

2 2

3 3 3

2 2

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

for(i=n-1;i>=1;i--)   
{

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

getch();   
}

28.

1

1 2 1

1 2 3 2 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",j);   
for(j=i-1;j>=1;j--)   
printf("%4d",j);   
printf("\n");

}

getch();   
}

29.

1

1 2 1

1 2 3 2 1

1 2 1

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",j);   
for(j=i-1;j>=1;j--)   
printf("%4d",j);   
printf("\n");

}

for(i=n-1;i>=1;i--)   
{

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",j);   
for(j=i-1;j>=1;j--)   
printf("%4d",j);   
printf("\n");

}

getch();   
}

30.

1

2 3 2

3 4 5 4 3

4 5 6 7 6 5 4

5 6 7 8 9 8 7 6 5

6 7 8 9 10 11 10 9 8 7 6

5 6 7 8 9 8 7 6 5

4 5 6 7 6 5 4

3 4 5 4 3

2 3 2

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=i;j<=2\*i-1;j++)   
printf("%4d",j);   
for(j=2\*i-2;j>=i;j--)   
printf("%4d",j);   
printf("\n");

}

for(i=n-1;i>=1;i--)   
{

for(j=1;j<=n-i;j++) printf(" ");

for(j=i;j<=2\*i-1;j++)   
printf("%4d",j);   
for(j=2\*i-2;j>=i;j--)   
printf("%4d",j);   
printf("\n");

}

getch();   
}

31.

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

#include<stdio.h>   
#include<conio.h>

void main()   
{

int i,j,k=1,n; clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=i;j++) printf("%4d",k++); printf("\n");

}

getch();   
}

32.

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

#include<stdio.h>   
#include<conio.h>

void main()   
{

int i,j,k=1,n; clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=i;j++) printf("%4d",k++); printf("\n");

}

getch();   
}

33.

A

B B

C C C

#include<stdio.h>   
#include<conio.h>

void main()   
{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

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

printf("%4c",i+64); printf("\n");

}

getch();   
}

34.

A

B B

C C C

B B

A

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

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

printf("%4c",i+64); printf("\n");

}

for(i=n-1;i>=1;i--)   
{

for(j=1;j<=n-i;j++) printf(" ");

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

printf("%4c",i+64); printf("\n");

}

getch();   
}

35.

1

2 2

3 3 3

2 2

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

for(i=n-1;i>=1;i--)   
{

for(j=1;j<=n-i;j++) printf(" ");

for(j=1;j<=i;j++)   
printf("%4d",i);

printf("\n");   
}

getch();   
}

36.

1

2 2

3 3 3

2 2

1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n;   
clrscr();

printf("Enter how many line you need to make pyramid = "); scanf("%d",&n);

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

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

for(i=n-1;i>=1;i--)   
{

for(j=1;j<=i;j++)   
printf("%4d",i);   
printf("\n");

}

getch();   
}

Loop

1. A Program That Read A Positive Integer & Display Its Factorial.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n;

long fact=1;

clrscr();

printf("Enter any number = "); scanf("%d",&n);

for(i=1;i<=n;i++) fact=fact\*i;

printf("Factorial %d = %ld",n,fact);

getch();

}

2. A Program That Read A Positive Integer & Display Sum Of Its Digit.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,sum=0; clrscr();

printf("Enter any number = "); scanf("%d",&n);

while(n>0)

{

sum=sum+n%10; n=n/10;

}

printf("Sum of digit = %d",sum);

getch();   
}

3. A Program That Read A Positive Integer & Display Reverse.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,sum=0; clrscr();

printf("Enter any number = "); scanf("%d",&n);

while(n>0)

{

sum=sum\*10+n%10; n=n/10;

}

printf("Reverse = %d",sum);

getch();

}

4. A Program That Read Any Decimal Number & Display Equivalent Binary   
 number.

#include<stdio.h>   
#include<conio.h>

void main()   
{

int i,n;   
clrscr();

printf("Enter any decimal number = "); scanf("%d",&n);

printf("Equivalent binary number is : "); for(i=15;i>=0;i--)

printf("%d",(n>>i)&1);

getch();

}

5. A Program That Read Any Decimal Number & Display Equivalent Octal   
 number.

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,n;   
clrscr();

printf("Enter any decimal number = "); scanf("%d",&n);

printf("Equivalent octal number is : "); for(i=15;i>=0;i-=3)

printf("%d",(n>>i)&7);

getch();   
}

6. A Program That Read Any Decimal Number & Display Equivalent   
 Hexadecimal number.

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,n,t;   
clrscr();

printf("Enter any decimal number = "); scanf("%d",&n);

printf("Equivalent hexadecimal number is : "); for(i=12;i>=0;i-=4)

{

t=((n>>i)&15); if(t<10)

printf("%d",t);   
else

printf("%c",t+55);   
}

getch();   
}

7. A Program That Read Two numbers & Display GCD (Greatest Common   
 Divisor).

#include<stdio.h>   
#include<conio.h>

void main()

{

int a,b,c;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&a);

printf("Enter 2nd number = "); scanf("%d",&b);

while(a%b!=0)   
{

c=a%b;   
a=b;

b=c;   
}

printf("Greatest Common Divisor(GCD) = %d",b);

getch();

}

8. A Program That Read Two numbers & Display LCM (Least Common   
 Multiple).

#include<stdio.h>   
#include<conio.h>

void main()   
{

int a,b,c,i;   
clrscr();

printf("Enter 1st number = "); scanf("%d",&a);

printf("Enter 2nd number = "); scanf("%d",&b);

c=1;

for(i=2;i<=a && i<=b;i++)   
{

while(a%i==0 && b%i==0)   
{

a=a/i;   
b=b/i;   
c=c\*i;   
}

}

c=c\*a\*b;

printf("Least Common Multiple(LCM) = %d",c);

getch();

}

9. A Program That Read Two numbers (a,b) & Display ab (a to the power b).

#include<stdio.h>

#include<conio.h>

void main()   
{

int a,b,i;

long int p=1; clrscr();

printf("Enter 1st number, a = "); scanf("%d",&a);

printf("Enter 2nd number,b = "); scanf("%d",&b);

for(i=1;i<=b;i++)   
p=p\*a;

printf("%d to th power %d = %ld",p);

getch();

}

10. A Program That Read Two numbers (n,r) & Display nPr (Permutation).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r,i;

long int f1,f2,p; clrscr();

printf("Enter 1st number, n = "); scanf("%d",&n);

printf("Enter 2nd number,r = ");

scanf("%d",&r);

if(n<=r)

printf("r must be less than n");   
else

{

f1=1;

for(i=1;i<=n;i++) f1=f1\*i;

f2=1;

for(i=1;i<=n-r;i++) f2=f2\*i;

p=f1/f2;

printf("%dP%d = %ld"n,r,p);   
}

getch();   
}

11. A Program That Read Two numbers (n,r) & Display nPr (Permutation).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r,i;   
long int p;   
clrscr();

printf("Enter 1st number, n = "); scanf("%d",&n);

printf("Enter 2nd number,r = "); scanf("%d",&r);

if(n<=r)

printf("r must be less than n");   
else

{

p=1;

for(i=n-r+1;i<=n;i++)   
p=p\*i;

printf("%dP%d = %ld",n,r,p);   
}

getch();   
}

12. A Program That Read Two numbers (n,r) & Display nPr (Permutation).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r,i;   
long int p;   
clrscr();

printf("Enter 1st number, n = "); scanf("%d",&n);

printf("Enter 2nd number,r = "); scanf("%d",&r);

if(n<=r)

printf("r must be less than n");   
else

{

for(p=1,i=n-r+1;i<=n;p=p\*i++);

printf("%dP%d = %ld",n,r,p);   
}

getch();   
}

13. A Program That Read Two numbers (n,r) & Display nCr (Combination).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r,i;

long int f1,f2,f3,p; clrscr();

printf("Enter 1st number, n = "); scanf("%d",&n);

printf("Enter 2nd number,r = "); scanf("%d",&r);

if(n<=r)

printf("r must be less than n");   
else

{

f1=1;

for(i=1;i<=n;i++) f1=f1\*i;

f2=1;

for(i=1;i<=r;i++) f2=f2\*i;

f3=1;

for(i=1;i<=n-r;i++) f3=f3\*i;

p=f1/(f2\*f3);

printf("%dC%d = %ld",n,r,p);   
}

getch();   
}

14. A Program That Read Two numbers (n,r) & Display nCr (Combination).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r,i;

long int f1,f2,f3,p;

clrscr();

printf("Enter 1st number, n = "); scanf("%d",&n);

printf("Enter 2nd number,r = "); scanf("%d",&r);

if(n<=r)

printf("r must be less than n");   
else

{

p=1;

for(i=1;i<=r;i++)   
p=p\*(n-i+1)/i;

printf("%dC%d = %ld",n,r,p);   
}

getch();   
}

15. A Program That Read Two numbers (n,r) & Display nCr (Combination).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r,i,x;

long int f1,f2,f3,p; clrscr();

printf("Enter 1st number, n = ");

scanf("%d",&n);

printf("Enter 2nd number,r = "); scanf("%d",&r);

if(n<=r)

printf("r must be less than n");   
else

{

if(n-r<r)   
x=n-r;   
p=1;

for(i=1;i<=x;i++)   
p=p\*(n-i+1)/i;

printf("%dC%d = %ld",n,r,p);   
}

getch();   
}

16. A Program That Read Two numbers (n,r) & Display nCr (Combination).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r,i,x;

long int f1,f2,f3,p; clrscr();

printf("Enter 1st number, n = ");

scanf("%d",&n);

printf("Enter 2nd number,r = "); scanf("%d",&r);

if(n<=r)

printf("r must be less than n");   
else

{

if(n-r<r)   
x=n-r;   
p=1;

for(i=1;i<=x;p=p\*(n-i+1)/i;i++);

printf("%dC%d = %ld",n,r,p);   
}

getch();   
}

17. A Program That Read Any Integer & Display Its Digital Root.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,r;   
clrscr();

printf("Enter any integer number, n = "); scanf("%d",&n);

while(n>9)   
{

r=0;

while(n>0)   
{

r=r+n%10;   
n=n/10;

}

n=r;   
}

printf("Digital root = %d",n);

getch();

}

18. A Program That Read Any Integer & Test Prime Or Not Prime.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,p;   
clrscr();

printf("Enter any number, n = "); scanf("%d",&n);

if(n<2)

p=0;   
else   
p=1;

for(i=2;i<n;i++) if(n%i==0)

p=0;

if(p==1)

printf("%d is Prime number",n);   
else

printf("%d is not Prime number",n);

getch();

}

19. Write a program that print all Fibonacci numbers from 1 to n.

#include<stdio.h>

#include<conio.h>   
#include<math.h>

void main()

{

long a,b,c;   
int n,i;

clrscr();

printf("Enter how many numbers, n = "); scanf("%d",&n);

a=0;

b=1;

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

printf("%10ld",a); c=a+b;

a=b;

b=c;   
}

getch();   
}

20. Write a program that read a number & test Fibonacci or not Fibonacci.

#include<stdio.h>

#include<conio.h>

void main()

{

long a,b,c;   
int n,i;

clrscr();

printf("Enter any numbers, n = "); scanf("%d",&n);

a=0;

b=1;

for(i=1;a<n;i++)   
{

c=a+b;   
a=b;

b=c;   
}

if(a==n)

printf("Fibonacci");   
else

printf("Not Fibonacci");

getch();

}

21. Write a program that read any integer & test prime or not prime (2).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,p;   
clrscr();

printf("Enter any number, n = "); scanf("%d",&n);

if(n<2)

p=0;

else   
{

p=1;

for(i=2;i<n;i++) if(n%i==0)

p=0;

}

if(p==1)

printf("%d is Prime number",n);   
else

printf("%d is not Prime number",n);

getch();

}

22. Write a program that read any integer & test prime or not prime (3).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,p;   
clrscr();

printf("Enter any number, n = "); scanf("%d",&n);

if(n<2)

p=0;

else   
{

p=1;

for(i=2;i<n;i++)

if(n%i==0)   
{

p=0;   
break;   
}

}

if(p==1)

printf("%d is Prime number",n);   
else

printf("%d is not Prime number",n);

getch();

}

23. Write a program that read any integer & test prime or not prime (4).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,p;   
clrscr();

printf("Enter any number, n = "); scanf("%d",&n);

if(n<2)

p=0;

else

{

p=1;

for(i=2;i<=n/2;i++) if(n%i==0)

{

p=0;   
break;   
}

}

if(p==1)

printf("%d is Prime number",n);   
else

printf("%d is not Prime number",n);

getch();

}

24. Write a program that read any integer & test prime or not prime (5).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,p,t;   
clrscr();

printf("Enter any number, n = "); scanf("%d",&n);

if(n<2)

p=0;   
else   
{

p=1;   
t=n/2;

for(i=2;i<=t;i++) if(n%i==0)

{

p=0;   
break;   
}

}

if(p==1)

printf("%d is Prime number",n);   
else

printf("%d is not Prime number",n);

getch();

}

25. Write a program that read any integer & test prime or not prime (6).

#include<stdio.h>

#include<conio.h>   
#include<math.h>

void main()

{

int n,i,p,t;   
clrscr();

printf("Enter any number, n = "); scanf("%d",&n);

if(n<2)

p=0;

else   
{

p=1;

t=sqrt(n);

for(i=2;i<=t;i++) if(n%i==0)

{

p=0;   
break;   
}

}

if(p==1)

printf("%d is Prime number",n);   
else

printf("%d is not Prime number",n);

getch();

}

26. Write a program that print all prime numbers from 1 to n.

#include<stdio.h>

#include<conio.h>   
#include<math.h>

void main()   
{

int n,i,j,p,t,k=1; clrscr();

printf("Enter any number, n = "); scanf("%d",&n);

for(i=2;i<=n;i++)   
{

p=1;

t=sqrt(i);

for(j=2;j<=t;j++) if(i%j==0)

{

p=0;   
break;   
}

if(p==1)   
{

printf("\n%d Prime number = %d",k,i);   
k++;

}

}

getch();   
}

27. Write a program that print all prime numbers from m to n (m>n).

#include<stdio.h>   
#include<conio.h>   
#include<math.h>

void main()

{

int m,n,i,j,p,t,k=1; clrscr();

printf("Enter 1st number, m = "); scanf("%d",&m);

printf("Enter 2nd number, n = "); scanf("%d",&n);

if(m>=n)

printf("m must be less than n.");   
else

{

for(i=m;i<=n;i++)   
{

if(i<2)   
p=0;

else

p=1;

t=sqrt(i);

for(j=2;j<=t;j++) if(i%j==0)

{

p=0;   
break;   
}

if(p==1)   
{

printf("\n%d Prime number = %d",k,i);   
k++;

}

}   
}

getch();   
}

28. Write a program that count total prime numbers from 1 to n.

#include<stdio.h>

#include<conio.h>   
#include<math.h>

void main()

{

int n,i,j,p,t,k=0; clrscr();

printf("Enter 1st number, n = "); scanf("%d",&n);

for(i=2;i<=n;i++)   
{

p=1;

t=sqrt(i);

for(j=2;j<=t;j++) if(i%j==0)

{

p=0;   
break;   
}

if(p==1)   
k++;

}

printf("Total Prime number = ",k);

getch();

}

29. Write a program that displays first n prime numbers.

#include<stdio.h>

#include<conio.h>   
#include<math.h>

void main()

{

int n,i,j,p,t,k=0; clrscr();

printf("Enter 1st number, n = "); scanf("%d",&n);

for(i=2;k<n;i++)   
{

p=1;

t=sqrt(i);

for(j=2;j<=t;j++)

if(i%j==0)   
{

p=0;   
break;   
}

if(p==1)   
{

printf("%8d",i);   
k++;

}

}

getch();   
}

30. Write a program that displays first n Fibonacci numbers.

#include<stdio.h>

#include<conio.h>

void main()

{

long a,b,c;   
int n,i;

clrscr();

printf("Enter how many numbers, n = "); scanf("%d",&n);

a=0;

b=1;

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

{

printf("%10ld",a); c=a+b;

a=b;

b=c;   
}

getch();

One Dimensional Array

1. Write a program that read & display an array.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100]; clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

printf("Arrays element : "); for(i=0;i<n;i++)

printf("\n\na[%d] = %d",i+1,a[i]);

getch();

}

2. Write a program that read & display sum (1).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],sum=0;; clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

for(i=0;i<n;i++)   
sum=sum+a[i];

printf("\nSummation of Arrays element = %d",sum);

getch();

}

3. Write a program that read & display sum (2).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],sum=0;; clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
sum=sum+a[i];   
}

printf("\nSummation of Arrays element = %d",sum);

getch();

}

4. Write a program that read & display average (1).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],sum=0; float avg;

clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
sum=sum+a[i];   
}

avg=sum/n;

printf("\nAverage of Arrays element = %2f",avg);

getch();

}

5. Write a program that read & display average (2).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],sum=0; clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
sum=sum+a[i];   
}

printf("\nAverage of Arrays element = %f",(float)sum/n);

getch();

}

6. Write a program that read & display average (3).

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],sum=0; clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
sum=sum+a[i];   
}

printf("\nAverage of Arrays element = %f",(float)sum/n);

getch();

}

7. Write a program that read an array & display maximum.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],max; clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

max=a[0];

for(i=1;i<n;i++)   
if(a[i]>max)   
 max=a[i];

printf("\nMaximum number of Arrays element = %d",max);

getch();   
}

8. Write a program that read an array & display minimum.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],max; clrscr();

printf("How many numbers = "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

max=a[0];

for(i=1;i<n;i++)   
if(a[i]<max)   
 max=a[i];

printf("\nMinimum number in Arrays element = %d",max);

getch();

}

9. Write a program that inserts any number in an array.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],p; clrscr();

printf("How many numbers, you input in array : "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

printf("\nEnter any position to insert : "); scanf("%d",&p);

if(p<0 || p>n)

printf("\nInsert is not possible, please give value greater than 0 & less than %d ",n);

else

{

p=p-1;

for(i=n-1;i>=p;i--) a[i+1]=a[i];

printf("\nEnter any number to insert : "); scanf("%d",&a[p]);

n++;

}

printf("\nAfter insert, Array contains : "); for(i=0;i<n;i++)

printf("\n\na[%d] = %4d",i+1,a[i]);

getch();

}

10. Write a program that deletes any number from an array.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],p; clrscr();

printf("How many numbers, you input in array : "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

printf("\nEnter any position to delete : "); scanf("%d",&p);

if(p<0 || p>n)

printf("\nDelete is not possible, please give value greater than 0 & less than %d ",n);

else

{

p=p-1;

for(i=p+1;i<n;i++) a[i-1]=a[i];

n--;

}

printf("\nAfter delete, Array contains : "); for(i=0;i<n;i++)

printf("\n\na[%d] = %4d",i+1,a[i]);

getch();

}

11. Write a program that searches any number from an array.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,a[100],p,f; clrscr();

printf("How many numbers, you input in array : "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

printf("\nEnter any number to search : "); scanf("%d",&p);

f=0;

for(i=0;i<n;i++) if(a[i]==p)

f=1;

if(f==1)

printf("\n%d is found in the array ",p);   
else

printf("\n%d is not found in the array ",p);

getch();

}

12. Write a program that read & sort an array using bubble sort in ascending   
 order.

#include<stdio.h>   
#include<conio.h>

void main()

{

int n,i,j,a[100],temp; clrscr();

printf("How many numbers, you input in array : "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

for(j=n-1;j>0;j--)   
for(i=0;i<j;i++)\   
 if(a[i]>a[i+1])   
 {

temp=a[i];   
a[i]=a[i+1];   
a[i+1]=temp;

}

printf("\nAfter Sorting, Array contains : "); for(i=0;i<n;i++)

printf("\n\na[%d] = %4d",i+1,a[i]);

getch();

}

13. Write a program that read & sort an array using bubble sort in   
 descending order.

#include<stdio.h>   
#include<conio.h>

void main()

{

int n,i,j,a[100],temp;

clrscr();

printf("How many numbers, you input in array : "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

for(j=n-1;j>0;j--)   
for(i=0;i<j;i++)\   
 if(a[i]<a[i+1])   
 {

temp=a[i];   
a[i]=a[i+1];   
a[i+1]=temp;

}

printf("\nAfter Sorting, Array contains : "); for(i=0;i<n;i++)

printf("\n\na[%d] = %4d",i+1,a[i]);

getch();

}

14. Write a program that read an array & display medium.

#include<stdio.h>

#include<conio.h>

void main()

{

int n,i,j,a[100],temp; clrscr();

printf("How many numbers, you input in array : "); scanf("%d",&n);

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

printf("\na[%d] = ",i+1);   
scanf("%d",&a[i]);   
}

for(j=n-1;j>0;j--)   
for(i=0;i<j;i++)\   
 if(a[i]<a[i+1])   
 {

temp=a[i];   
a[i]=a[i+1];   
a[i+1]=temp;

}

if(n%2==1)

printf("Medium number in the array = %d",a[n/2]);   
else

printf("Medium number in the array = %d & %d",a[n/2-  
1],a[n/2]);

getch();   
}

15. Write a program that displays first n prime numbers.

#include<stdio.h>   
#include<conio.h>   
#include<math.h>

void main()

{

long n,a[1000],prime,i,j,t,p; clrscr();

printf("How many prime numbers : "); scanf("%ld",&n);

p=0;

for(i=2;p<n;i++)   
{

prime=1;   
t=sqrt(i);

for(j=2;j<=t;j++) if(i%j==0)

{

prime=0;   
break;

}

if(prime==1)   
a[p++]=i;

}

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

printf("\n\na[%ld] = %ld",i+1,a[i]); getch();

}

16. Write a program that displays first n Fibonacci numbers.

#include<stdio.h>

#include<conio.h>   
#include<math.h>

void main()

{

int i,n;

long a[1000]; clrscr();

printf("How many numbers : "); scanf("%d",&n);

a[0]=0;

a[1]=1;

for(i=2;i<n;i++)

a[i]=a[i-1]+a[i-2];

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

printf("\n\na[%d] = %ld",i+1,a[i]); getch();

}

17. Write a program that reads any decimal number & equivalent binary   
 number.

#include<stdio.h>   
#include<conio.h>   
#include<math.h>

void main()   
{

int i,n,a[1000]; long num;

clrscr();

printf("Enter any decimal number : "); scanf("%ld",&num);

n=0;

while(num>0)   
{

a[n]=num%2;   
num=num/2;   
n++;

}

printf("\nEquivalent binary number is : "); for(i=n-1;i>=0;i--)

printf("%d",a[i]); getch();

}

Multi Dimensional Array

1. Write a program that read & display matrices.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,j,r,c,a[10][10]; clrscr();

printf("Enter how many row : "); scanf("%d",&r);

printf("Enter how many column : "); scanf("%d",&c);

for(i=0;i<r;i++)

for(j=0;j<c;j++)

scanf("%d",&a[i][j]);

for(i=0;i<r;i++)

{

for(j=0;j<c;j++)

printf("%5d",a[i][j]); printf("\n");

}

getch();   
}

2. Write a program that adds two matrices.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,j,r1,c1,r2,c2,a[10][10],b[10][10],c[10][10];

clrscr();

printf("Enter how many row in first matrics A : "); scanf("%d",&r1);

printf("Enter how many column in first matrics A : "); scanf("%d",&c1);

for(i=0;i<r1;i++)

for(j=0;j<c1;j++)

scanf("%d",&a[i][j]);

printf("Enter how many row in second matrics B : "); scanf("%d",&r2);

printf("Enter how many column in second matrics B : "); scanf("%d",&c2);

for(i=0;i<r2;i++)

for(j=0;j<c2;j++)

scanf("%d",&b[i][j]);

if(r1==r2 && c1==c2)   
{

for(i=0;i<r1;i++)

for(j=0;j<c1;j++)

c[i][j]=a[i][j]+b[i][j];

printf("\nThe sum of A & B is : \n"); for(i=0;i<r1;i++)

{

for(j=0;j<c1;j++)

printf("%4d",c[i][j]); printf("\n\n");

}   
}

else

printf("\nThe sum of A & B is impossible.");

getch();

}

3. Write a program that multiplies two matrices.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,j,k,r1,c1,r2,c2,a[10][10],b[10][10],c[10][10]; clrscr();

printf("Enter how many row in first matrics A : "); scanf("%d",&r1);

printf("Enter how many column in first matrics A : "); scanf("%d",&c1);

for(i=0;i<r1;i++)

for(j=0;j<c1;j++)

scanf("%d",&a[i][j]);

printf("Enter how many row in second matrics B : "); scanf("%d",&r2);

printf("Enter how many column in second matrics B : "); scanf("%d",&c2);

for(i=0;i<r2;i++)

for(j=0;j<c2;j++)

scanf("%d",&b[i][j]);

if(r1==r2 && c1==c2)   
{

for(i=0;i<r1;i++)   
for(j=0;j<c1;j++)   
{

c[i][j]=0;

for(k=0;k<c1;k++)

c[i][j]=c[i][j]+a[i][k]\*b[k][j];   
}

printf("\nThe multiplication of A & B is : \n"); for(i=0;i<r1;i++)

{

for(j=0;j<c2;j++)

printf("%4d",c[i][j]); printf("\n\n");

}

}

else

printf("\nThe multiplication of A & B is impossible.");

getch();   
}

4. Write a program that add & multiply two matrices.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,j,r1,c1,r2,c2,a[10][10],b[10][10],c[10][10]; clrscr();

printf("Enter how many row in first matrics A : "); scanf("%d",&r1);

printf("Enter how many column in first matrics A : "); scanf("%d",&c1);

for(i=0;i<r1;i++)

for(j=0;j<c1;j++)

scanf("%d",&a[i][j]);

printf("Enter how many row in second matrics B : "); scanf("%d",&r2);

printf("Enter how many column in second matrics B : "); scanf("%d",&c2);

for(i=0;i<r2;i++)

for(j=0;j<c2;j++)

scanf("%d",&b[i][j]);

if(r1==r2 && c1==c2)   
{

for(i=0;i<r1;i++)

for(j=0;j<c1;j++)

c[i][j]=a[i][j]+b[i][j];

printf("\nThe sum of A & B is : \n"); for(i=0;i<r1;i++)

{

for(j=0;j<c1;j++)

printf("%4d",c[i][j]); printf("\n\n");

}

}

else

printf("\nThe sum of A & B is impossible.");

if(r1==r2 && c1==c2)

{

for(i=0;i<r1;i++)   
for(j=0;j<c1;j++)   
{

c[i][j]=0;

for(k=0;k<c1;k++)

c[i][j]=c[i][j]+a[i][k]\*b[k][j];   
}

printf("\nThe multiplication of A & B is : \n"); for(i=0;i<r1;i++)

{

for(j=0;j<c2;j++)

printf("%4d",c[i][j]); printf("\n\n");

}

}

else

printf("\nThe multiplication of A & B is impossible."); getch();

}

5. Write a program that display Pascal pyramid.   
 1

2 1

3 3 1

4 6 4 1

5 10 10 5 1

#include<stdio.h>   
#include<conio.h>

void main()

{

int i,j,n,a[30][30]; clrscr();

printf("Enter how many line : "); scanf("%d",&n);

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

for(j=0;j<=i;j++)

{

if(j==0)

a[i][j]=i+1;   
else if(i==j)   
a[i][j]=1;

else

a[i][j]=a[i-1][j-1]+a[i-1][j];   
 printf("%5d",a[i][j]); }

printf("\n");   
}

getch();   
}

String.h

1. Write a program that read a line of text & display its length.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];   
int l;

clrscr();

printf("Enter any line : ");

gets(st);

l=strlen(st);

printf("String length = %d",l);

getch();

}

2. Write a program that read a line of text & display it’s in reverse order.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];   
int i, l;

clrscr();

printf("Enter any line of text : "); gets(st);

l=strlen(st);

printf("Reverse of the String = "); for(i=l-1;i>=0;i--)

printf("%c",st[i]);

getch();

}

3. Write a program that read two line of text & copy second line into first   
 line.

#include<stdio.h>   
#include<conio.h>   
#include<string.h>

void main()

{

char st1[100],st2[100];

clrscr();

printf("Enter first line of text : "); gets(st1);

printf("Enter second line of text : "); gets(st2);

strcpy(st1,st2);

printf("\nAfter copy the string :\n");   
printf("First line of text : %s\n",st1);   
printf("Second line of text : %s",st2);

getch();

}

4. Write a program that read two line of text & add second line with first   
 line.

#include<stdio.h>   
#include<conio.h>

#include<string.h>

void main()

{

char st1[100],st2[100];

clrscr();

printf("Enter first line of text : "); gets(st1);

printf("Enter second line of text : "); gets(st2);

strcat(st1,st2);

printf("\nAfter add the string :\n");   
printf("First line of text : %s\n",st1);   
printf("Second line of text : %s",st2);

getch();

}

5. Write a program that compares two strings.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st1[100],st2[100];   
int n;

clrscr();

printf("Enter first line of text : "); gets(st1);

printf("Enter second line of text : "); gets(st2);

n=strcmp(st1,st2);

printf("\nComparing the two string : %d",n);

getch();

}

6. Write a program that compares two strings without case sensitivity.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st1[100],st2[100];   
int n;

clrscr();

printf("Enter first line of text : "); gets(st1);

printf("Enter second line of text : "); gets(st2);

n=strcmpi(st1,st2);

printf("\nWithout sensitivity Comparing the two string :

%d",n);

getch();   
}

7. Write a program that read a line of text & display in lower case.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];

clrscr();

printf("Enter line of text : "); gets(st);

strlwr(st);

printf("\nIn lower case : %s",st);

getch();

}

8. Write a program that read a line of text & display in upper case.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()   
{

char st[100];

clrscr();

printf("Enter line of text : "); gets(st);

strupr(st);

printf("\nIn upper case : %s",st);

getch();

}

String

1. White a progarm that convert a line to upper case.

#include<stdio.h>

#include<conio.h> #include<string.h> void main()

{

char st[100];   
int i,l;

clrscr();

printf("Enter any line: "); gets(st);

l=strlen(st);

for(i=0; i<l; i++)   
{

if(st[i]>='a' && st[i]<='z')   
 printf("%c",st[i]-32); else

printf("%c",st[i]); getch();

}

}

2. Write a program that convert a line to lower case.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];   
int i,l;

clrscr();

printf("Enter any line: "); gets(st);

l=strlen(st);

for(i=0; i<l; i++)

if(st[i]>='A' && st[i]<='Z')   
 printf("%c",st[i]+32); else

printf("%c",st[i]); getch();

}

3. Write a program that read your name and display every character with one space.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];   
int i,l;

clrscr();

printf("Enter your name: "); gets(st);

l=strlen(st);

for(i=0; i<l; i++)

printf("%c ",st[i]); getch();

}

4. Write a program that read your name and display every character with one space in reverse order.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];   
int i,l;

clrscr();

printf("Enter your name: "); gets(st);

l=strlen(st);

for(i=l-1; i>=0; i--)

printf("%c",st[i]); getch();

}

5. Write a program that read any line of text and display every character in saparate line.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];   
int i,l;

clrscr();

printf("Enter any line: "); gets(st);

l=strlen(st);

for(i=0; i<l; i++)

printf("\n%c",st[i]); getch();

}

6. Write a program that read any line of text and display every character with ASCII value in saparate line.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];

int i,l;   
clrscr();

printf("Enter any line: ");   
 gets(st);

l=strlen(st);

for(i=0; i<l; i++)

printf("\n%c %d",st[i],st[i]); getch();

}

7. Write a program that read a line of text and display number of upper case, lower case, digit, space and other character.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[100];

int i,l,upper=0,lower=0,digit=0,space=0,other=0; clrscr();

printf("Enter any line: "); gets(st);

l=strlen(st);

for(i=0; i<l; i++)

if(st[i]>='a' && st[i]<='z')   
 lower++;

else if(st[i]>='A' && st[i]<='Z')   
 upper++;

else if(st[i]>='0' && st[i]<='9')   
 digit++;

else if(st[i]==' ')   
 space++;

else

other++;

printf("\nUpper= %d",upper);   
printf("\nLower= %d",lower);   
printf("\nSpace= %d",space);

printf("\nOther= %d",other); getch();

}

String

10. Write a program that read a line of text and display the frequency of every character .

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[1000];   
int i,l,a[256];

clrscr();

printf(“Enter any line of text : ”);   
gets(st);

for(i=0;i<256;i++)   
a[i]=0;

l=strlen(st);   
a[st[i]]++;

for(i=0;i<256;i++)   
if(a[i]>0)

printf(“%c=%2d\t”,I,a\*i+);

getch();   
}

11. Write aprogram that read and display an array of string.

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[40][100];   
inr i,n;

clrscr();

printf(“How many line :”); scanf(“%d\n”,&n);

for(i=0;i<n;i++)   
gets(st[i]);

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

printf(“\n%s”,st\*i+);

getch();   
}

12. Write a program that read an array of string and display in alphabetic order (With case sensitive ).

#include<stdio.h>

#include<conio.h>   
#include<string.h>

void main()

{

char st[40][100],temp[40]; int i,n,outer,inner;

clrscr();

printf(“How many word :”); scanf(“%d\n”,&n);

for(i=0;i<n;i++)   
gets(st[i]);

for(outer=n-1;outer>=0;outer--);   
for(inner=0;inner<outer;inner++);

if(strcmp(st[inner+1],st[inner+1]>0)   
{

Strcpy(temp,st[inner]);

Strcpy(st[inner],st[inner+1]);   
Strcpy(st[inner+1],temp);

}

For(i=0;i<n;i++)

Printf(“\n%s”,st\*i+);   
getch();

}

13. Write a program that read an array of string and display in alphabetic order (Without case sensitive).

#include<stdio.h>

#include<conio.h>   
#include<strng.h>

void main()

{

char st[40][100],temp[40]; int i,n,outer,inner;

clrscr();

printf(“How many word :”); scanf(“%d\n”,&n);

for(i=0;i<n;i++)   
gets(st[i]);

for(outer=n-1;outer>=0;outer--)   
for(inner=0;inner<outer;inner++)   
if(strcmpi(st[inner],st[inner+1])>0)   
{

strcpy(temp,st[inner]);

strcpy(st[inner],st[inner+1]);   
 strcpy(st[inner+1],temp); }

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

printf(“\n%s”,st\*i+);   
getch();

}

14. Write a program that read any binary number and display equivalent decimal number.

#include<stdio.h>   
#include<conio.h>   
#include<string.h>

void main()

{

char st[100];

long i,n,l;   
clrscr();

printf(“Enter any binary number:”); scanf(“%s”,st);

n=0;

l=strlen(st);

for(i=0;i<l;i++)   
n=n\*2+st[i]-48;

printf(“Equivalent decimal number is :%ld”,n);   
getch();

}

15. Write a program that read any octal number and display equivalent decimal number .

#include<stdio.h>   
#include<conio.h>   
#include<string.h>

void main()

{

char st[100];   
longi,n,l;

clrscr();

printf(“Enter any octal number :”) scanf(“%s”,st);

n=0;

l=strlen[st];

for(i=0;i<l;i++)   
n=n\*8+st[i]-48;

printf(“Equivalent decimal number :”);   
getch();

}

16. Write a program that read any hexadecimal number and display equivalent decimal number.

#include<stdio.h>   
#include<conio.h>   
#include<string.h>   
void main()

{

char st[100];   
long i,n,l;

clrscr();

printf(“Enter any hexadecimal number:”); scanf(“%s”,st);

n=0;

l=strlen(st);

for(i=0;i<l;i++)

if(st\*i+х=`0’ && st\*i+<=`9’) n=n\*16+st[i]-48;

else if (st\*i+х=` ’ && st\*i+<=`F’) n=n\*16+st[i]-55;

else if(st\*i+х=`a’ && st\*i+<=`f’ )

printf(“Equivalent decimal number is : %ld”,n);   
getch();

}

14. File Write

1. Write a program that writes 1 to 10 in a file.

#include<stdio.h>   
#include<conio.h>

void main()

{

int i;

FILE \*fp;

fp=fopen(“Cse͘txt”,”w”); for(i=1;i<=10;i++)

fprintf(fp,”%4d”,i);   
}

2. Write a program that write the following pyramid in file .   
1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

#include<stdio.h>   
#include<conio.h>

void main()   
{

int j,j;   
FILE \*x;

x=fopen(“Fw02͘out”,”w”); for(i=1;i<=5;i++)

{

for(j=1;j<=i;j++)   
 fprintf(x,”%4d”,i);   
 fprintf(x,”\n”); }

}

3. Write a program that read an array and write and write in a file.

#include<stdio.h>

#include<conio.h>

void main()   
{

int i,n,a[100];   
FILE \*fp;

clrscr();

fp=fopen(“Fw03͘out”,”w”);

printf(“How many number :”); scanf(“%d”,&n);

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

scanf(“%d”,&a\*i+);

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

fprintf(fp,”%4d”,a\*i+);   
}

4. Write a program that read an array and write and write in a file with ascending order.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,a[100],outer,inner,temp;

FILE \*fp;

clrscr();

fp=fopen(“Fw04͘out”,”w”);

printf(“How many numbers :”); scanf(“%d”,&a\*i+);

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

scanf(“%d”,&a\*i+);

for(outer=n-1;outer>=0;outer++) for(inner=0;inner<outer;inner++) if(a[inner]>a[inner])

{

temp=a[inner];

a[inner]=a[inner+1];   
a[inner+1]=temp;   
}

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

fprintf(fp,”%4d”,a\*i+);   
}

15.File Read

1. Write a program that read n numbers from a file and display in output screen.

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,a[100];   
FILE \*fp;

clscr();

fp=fopen(“fr01͘in”,”r”);

printf(“How many number :”); scanf(“%d”,&n);

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

fscanf(fp,”%d”,&a\*i+;

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

printf(“%4d”,a\*i+);   
getch();

}

2. Write a program that read an array until EOF(end of file).

#include<stdio.h>

#include<conio.h>

void main()

{

int i,n,a[100];   
FILE \*fp;

clrscr();

fp=fopen(“fr02͘in”,”r”);

n=0;

while(fscanf(fp,”%d”,&a\*n+)!=EOF);   
n++;

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

printf(“%4d”,a\*i+);   
getch();

}

3. Write a program that read an array until EOF(end of file).

#include<stdio.h>

#include<conio.h>

void main()

{

int a;

FILE \*fp;   
clrscr();

fp=fopen(“Fr03͘in”,”r”);

while(fscanf(fp,”%d”,&a)!=EOF); printf(“%4d”,a);

getch();

}

4. Write a program that read every character from a file and display in output screen.

#include<stdio.h>

#include<conio.h>

void main()

{

char a;   
FILE \*fp;

clrscr();

fp=fopen(“fr04͘cpp”,”r”);

while(fscanf(fp,”%c”,&a)!=EOF) printf(“%c”,a);

getch();

}

5. Write a program that read display content of this file in output screen.

#include<stdio.h>

#include<conio.h>

void main()

{

char a;   
FILE \*fp;

clrscr();

fp=fopen(“fr05͘cpp”,”r”);

while(fscanf(fp,”%c”,&a)!=EOF) printf(“%c”,a);

getch();

}

6.Write a program that read every character from a file and display in upper case.

#include<stdio.h>

#include<conio.h> Void main()

{

char a;   
FILE \*fp;   
clrscr();

fp=fopen(“fr06͘cpp”,”r”);

while(fscanf(fp,”%c”,&a)!=EOF) if(a>=’a’&&a<=’z’)

printf(“%c”,a-32);   
else

printf(“%c”,a);   
getch();

}

7.Write a program that read every character from a file and display in lower case.

#include<stdio.h>

#include<conio.h> void main()

{

char a;   
FILE \*fp;   
clrscr();

fp=fopen(“fr06͘cpp”,”r”);

while(fscanf(fp,”%c”,&a)!=EOF) if(aх=’ ’&&a<=’Z’)

printf(“%c”,a+32);   
else

printf(“%c”,a);   
getch();

}

8.Wirte a program that count number of lower case ,upper case,digit,space,line and other character in a file.

#include<stdio.h>

#include<conio.h> void main()

{

char ch;

int lower=0,upper=0,digit=0,space=0,other=0,line=1;   
FILE \*fp;

clrscr();

fp=fopen(“fr08͘cpp”,”r”);

while(fscanf(fp,”%c”,&ch)!=EOF) if(chх=’a’&&ah<=’z’)

lower++;

else if(chх=’0’&&ch<=’9’)   
digit++;

else if(ch==’\n’)   
line++;

else if(ch==’ ’)   
space++;

else

other++;

printf(“Lower=%d\n”,lower);   
printf(“Upper=%d\n”,upper);   
printf(“Digit=%d\n”,digit);   
printf(“Space=%d\n”,space);   
printf(“Line=%d\n”,line);   
printf(“Other=%d\n”,other);   
getch();

}

9.Write a program that displays the frequencies of every character in a file.

#include<stdio.h>

#include<conio.h> Void main()

{

Char ch;

Int a[256],I;   
FILE \*fp;

clrscr();

for(i=0;i<256;i++)   
a[i]=0;

fp=fopen(“fr09͘cpp”,”r”);

while(fscanf(fp,”%c”,&ch)!=EOF)   
a[ch]++;

for(i=32;i<256;i++)   
if(a[i]>0)

printf(“%c=&d\t”,I,a\*i+);   
getch():

}

16.File Read and Write

1.Write a program that read first n numbers in a file and display in another file.

#include<stdio.h>

#include<conio.h> void main()

{

Int I,n,a[100];   
FILE \*fp,\*fo;   
clrscr();

fp=fopen(“Frw01͘in”,”r”);

fo=fopen(“Frw01͘out”,”w”);   
printf(“How many number:”);   
scanf(“%d”,&n);

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

fscanf(fp,”%d”,&a\*i+); for(i=0;i<n;i++)

fprintf(fo,”%4d”,a\*i+);   
}

2.Write a program that read all numbers from a file Data.i   
and displayeven numbers in Even.out,odd numbers in   
Odd.out.

#include<stdio.h>   
#include<conio.h>   
void main()

{

Int n;

FILE \*fin,\*fe,\*fo;   
clrscr();

fin=fopen(“Data͘in”,”r”);   
fe=fopen(“Even͘out”,”w”);

fo=fopen(“Odd͘out”,”w”);

while(fscanf(fin,”%d”,&n)!=EOF)   
if(n%2==0)

fprintf(fe,”%4d”,n);   
else

fprintf(fo,”%4d”,n);   
}

3.Write a program that read all numbers in afile and write another file in descending order.

#include<stdio.h>

#include<conio.h> void main()

{

int I,n,a[100],inner,outer,temp; FILE \*fi,\*fo;

fi=fopen(“Frw03͘in”,”r”);   
fo=(“Frw03͘out”,”w”);   
n=0;

while(fscanf(fi,”%d”,&a\*n+)!=EOF)   
n++;

for(outer=n-1;outer>=0;outer--)   
for(inner=0,inner<outer;inner++)

if(a[inner]<a[inner+1])   
{

temp=a[inner];

a[inner]=a[inner+1];   
a[inner+1]=temp;   
}

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

fprintf(fo,”%4d”,a\*i+);

}

17.Structure

1.Write a program that read and display any students name , roll and mark.

#include<stdio.h>

#include<conio.h>   
{

struct student   
{

char name[30];   
int roll,mark;   
};

void main()   
{

struct student a;   
clrscr();

printf(“Name: ”);

scanf(“%s”,a͘name);

printf(“Roll: ”);

scanf(“%d”,&a͘roll);   
printf(“Mark: ”);   
scanf(“%d”,&a͘mark);

printf(“\nName: %s \nRoll: %d \nMark: %d”,a͘name,a͘roll,a͘mark);

getch();

}

2.Write a program that read and display some students name,roll and mark.

#include<stdio.h>

#include<conio.h>   
Struct student   
{

char name[30];   
int roll,mark;   
};

Void main()   
{

Struct student a[100];   
int i,n;

clrscr();

printf(“How many students: ”); scanf(“%d”,&n);

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

Printf(“Name: ”);

Scanf(“%s”,a\*i+͘name); Printf(“Roll: ”);

Scanf(“%d”,&a\*i+͘roll);   
Printf(“Marks: ”);

Scanf(“%d”,&a\*i+͘mark);   
}

Printf(“\nName Roll Mark”);

Printf(“\n~~~~~ ~~~ ~~~~”);

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

printf(“\n%-10s %4d %4d ”,a\*i+͘name,a\*i+͘roll,a\*i+͘mark);

getch();

}

3.Write a program that read some students name,roll and mark from a file and display in screen.

#include<stdio.h>

#include<conio.h>   
Struct student   
{

Char name[30];   
Int roll, mark;   
};

Void main()   
{

Struct student a[100];   
int i,n;

FILE \*fi;

clrscr();

fi=fopen(“J075͘in”,”r”);   
n=0;

while(fscanf(fi,”%s %d %d”, a\*n+͘name,&a\*n+͘roll,&a\*n+͘mark)!=EOF)   
n++;

printf(“\nName Roll Mark”);

printf(“\n~~~~ ~~~~ ~~~~”);

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

printf(“\n%-10s %4d %4d”,a\*i+͘name,a\*i+͘roll,a\*i+͘mark);   
getch();

}

4.Write a program that read some students name roll and   
mark from a file, sort and display in screen according to   
mark.

#include<stdio.h>   
#include<conio.h>   
Struct student   
{

Char name[30];   
int roll,mark;   
};

void main()   
{

Struct student a[100],temp;   
int i,j,n;

FILE \*fi;   
Clrscr();

fi=fopen(“J075͘in”,”r”);   
n=0;

while(fscanf(fi,”%s %d %d ”,a\*n+͘name,&a\*n+͘roll,&a\*n+͘mark)!=EOF)   
n++;

for(i=n-1;i>=0;i--)   
for(j=0;j<I;j++)

if(a[j].mark<a[j+1].mark)   
{

temp=a[j];   
a[j]=a[j+1];   
a[j+1]=temp;   
}

printf(“\nName Roll Mark”);

printf(“\n~~~~ ~~~~ ~~~~”);

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

printf(“\n%-10s %4d %4d”,a\*i+͘name,a\*i+͘roll,a\*i+͘mark);

getch();   
}

5.write a program that read some students name,three subjects mark and display name,total averagemark and grade point average.

#include<stdio.h>

#include<conio.h>   
Struct student   
{

char name[20];

int m1,m2,m3,total;   
};

Void main()   
{

Struct student a[100];   
Nt I,n;

FILE \*fp;

Clrscr();

fp=fopen(“J077͘in”,”r”);   
n=0;

while(fscanf(fp,“%s %d %d %d”,a\*n+͘name,&a\*n+͘m1,&a\*n+͘m2,a\*n+͘m3)!=EOF)   
{

a[n].total=a[n].m1+a[n].m2+a[n].m3;   
n++;

}

Printf(“\nName Total

Printf(“\n~~~~ ~~~~ for(i=0;i<n;i++)

{

Printf(“\n%-10s %5d If(a[i].total/3>=80)

printf(“ +”);

else if(a[i].total/3>=70)   
printf(“ ”);

else if(a[i].total/3>=60)   
printf(“ -”);

else if(a[i].total/3>=50) printf(“B”);

else if(a[i].total/3>=40) printf(“C”);

else if(a[i].total/3>=33) printf(“D”);

verage Grade”); ~~~~~~~ ~~~~~”);

%7͘2f”,a\*i+͘name,a\*i+͘total,a\*i+͘total/3͘0);

else

printf(“F”);   
}

getch();   
}

6.Write a program that read roll,three subjects mark and display the highest mark in each subjects and highest total with the students roll who obtained this.

#include<stdio.h>

#include<conio.h>   
Struct student   
{

int roll,sub1,sub2,sub3,total;   
};

Void main()   
{

Int I,n,hm1,hr1,hm2,hr2,hm3,hr3,htm,htr; Struct student a[100];

Clrscr();

Printf(“How many student:”); Scanf(“%d”,&n);

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

Printf(“Roll:”);

Scanf(“%d”,&a\*i+͘roll);

Printf(“Sub1:”);

Scanf(“%d”,&a\*i+͘sub1); Printf(“Sub2:”);

Scanf(“%d”,&a\*i+͘sub2); Printf(“Sub3:”);

Scanf(“%d”,&a\*i+͘sub3);

a[i].total=a[i].sub1+ a[i].sub2+ a[i].sub3;   
}

Printf(“\nRoll Total”);

Printf(“\n~~~~ ~~~~”);

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

printf(“\n%4d %5d”,a\*i+͘roll,a\*i+͘total); hm1=a[0].sub1;

hr1=a[0].roll;

hm2=a[0].sub2;   
hr2=a[0].roll;   
hm3=a[0].sub3;   
hr3=a[i].roll;

htm=a[0].total;   
htr=a[0].roll;

for(i=1;I,n;i++)   
{

If(a[i].sub1>hm1)   
{

hm1=a[i].sub1;   
hr1=a[i].roll;   
}

if(a[i].sub2>hm2)   
{

hm2=a[i].sub2;   
hr2=a[i].roll;   
}

if(a[i].sub3>hm3)   
{

hm3=a[i].sub3;   
hr3=a[i].roll;   
}

if(a[i].total>htm)   
{

htm=a[i].total;   
htr=a[i].roll;   
}

}

printf(“\nSub1 Highest mark=%d Roll=%d”,hm1,hr1);

printf(“\nSub2 Highest mark=%d Roll=%d”,hm2,hr2);

printf(“\nSub3 Highest mark=%d Roll=%d”,hm3,hr3);

printf(“\n\nHighest total mark is %d obtained by roll %d”,htm,htr);   
getch();

}

7.Write a program that read some players name,team name   
and batting average.Display this according to team name.

#include<stdio.h>

#include<conio.h>   
Struct cricket

{

Char player[30],team[30],avg[10];   
} ;

Void main()   
{

Int I,n,outer,inner;

Struct cricket a[12],temp;   
Clrscr();

Printf(“How many player:”); Scanf(“%d”,&n);

For(i=0;i<n;i++)   
{

Printf(“Player name:”);   
Scanf(“%s”,a\*i+͘player);   
Printf(“Team name:”);   
Scanf(“%s”,a\*i+͘team);   
Printf(“Batting average:”);   
Scanf(“%s”,a\*i+͘avg);   
}

For(outer=n-1;outer>0;outer--)

For(inner=0;inner<outer;inner++)

If(strcmp(a[inner].team,a[inner+1].team>0)   
{

Temp=a[inner];

a[inner]=a[inner+1];   
a[inner+1]=temp;   
}

Printf(“\nPlayer name Printf(“\n~~~~~~~~~~” For(i=0;i<n;i++)

Printf(“\n%-11s %-12s   
getch();

}

Team name verage”);

``````````````````` ````````````````”);

%7s”,a\*i+͘player,a\*i+͘team,a\*i+͘avg);

8. A file contains some persons name and telephone   
numbers.Write a program to perform the following task:

i)Read telephone number and display name.

ii)read name and display telephone number. #include<stdio.h>

#include<conio.h>   
#include<string.h>

Struct tnt

{

Char name[20];   
Long phone;   
};

Void main()   
{

Int I,n;

Long p;char na[20];   
Struct tnt a[100];   
FILE \*fp;

Clrscr();

fp=fopen(“J098͘in”,”r”);   
n=0;

while(fscanf(fp,”%s%ld”,a\*n+͘name,&a[n].phone)!=EOF)   
{

Printf(“Telephone number:”); Scanf(“%ld”,&p);

For(i=0;i<n;i++)   
If(a[i].phone==p)

Printf(“%s”,a\*i+͘name);   
Printf(“\nName”);   
Scanf(“%s”,na);   
For(i=0;i<n;i++)0

If(strcmp(a[i].name,na)==0)   
Printf(“%ld”,a\*i+͘phone);   
getch();

}

}

9.A file contains some contry name and capital.Write a

program that repeatedly read any country name and display capital until user enters the word “END”͘

#include<stdio.h>

#include<conio.h>   
#include<string.h>   
Struct desh

{

Char name[20],capital[20];   
};

Void main()   
{

Int i,n;

Struct desh a[100];   
FILE \*fp;

Char st[20];

Clrscr();

Fp=fopen(“J114͘in”,”r”);   
n=0;

while(fscanf(fp,”%s %s”,a\*n+͘name,a\*n+͘capital)!=EOF)   
n++;

for(; ;)   
{

Printf(“\nCountry name:”); Scanf(“%s”,st);

If(strcmpi(st,”END”)==0)   
Break;

For(i=0;i<n;i++)

If(strcmpi(a[i].name,st)==0)

Printf(“capital: %s”,a\*i+͘capital);   
}

Getch():   
}

10. A file contains hotels name ,address,grade,charge and number of rooms.Write a program that performs the   
following task:

i)Display all hotels information with given grade.

ii)Display all hotels information whose charge is less than giver charge.

#include<stdio.h>   
#include<conio.h>   
Struct hotel

{

Char name[30],add[30];

Int grade,charge,num\_room;   
};

Void main()   
{

Int I,j,g,n,value;

Struct hotel a[100],temp;

PAGE 174

FILE \*fp;   
Clrscr();

fp=fopen9(“j123͘in”,”r”);   
n=0;

while(fscanf(fp,”%s %s %d %d %d”,a\*n+͘add,&a\*n+͘grade,&a\*n+͘charge,&a\*n+͘num\_room)!=EOF)   
n++;

for(i=n-1;i>0;i++)   
for(j=0;j<i;j++)

if(a[j].charge>a[j+1].charge)   
{

Temp=a[j];   
A[j]=a[j+1];   
A[j+1]=temp;   
}

Printf(“\nEnter any grade: ”); Scanf(“%d͘”&g);

Printf(“\nName Adress Grade Charge Nun\_Room”);

Printf(\”n~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~”);

For(i=0;i<n;i++)

If(a[i].grade==g)

Printf(“\n%-10s %-10s %5d %6d %5d”,a\*i+͘name,a\*i+͘add,a\*i+͘grade,a\*i+͘charge,a\*i+͘num\_room); Printf(“\n\n\nEnter any valu : ”);

Scanf(“%d”,&value);

Printf(“\nName ddress Grade Charge Num\_Room”);

Printf(“\n~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~”);

For(i=0;i<n;i++)

If(a[i].charge<=value)

PAGE 175

printf(‘\n%-10s %-10s %5d %6d%5d’,a\*i+͘name,a\*i+͘add,a\*i+͘grade,a\*i+͘charge,a\*i+͘num\_room);

getch();   
}

11. Write a program that read some players name ,team name, batting average and display team wise player information .

#include<stdio.h>   
#include<conio.h>   
#include<string.h>

struct cricket

{

char player[30],team[30],avg[10];   
};

void main()   
{

int I,n,outer,inner;

struct cricket a[12],temp; char st[30];

clrscr();

printf(“How many player: ”); scanf(“%d”,&n);

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

printf(“Players name : ”);   
scanf(“%s”,a\*i+͘player);   
printf(“Team name: ”);   
scanf(“%s”,a\*i+͘team);   
printf(“Batting average : ”);   
scanf(“%s”,a\*i+͘avg);

}

for(outer=n-1; outer>0;outer--)   
for(inner=0;inner<outer;inner++)

PAGE 176

If(strcmp(a[inner].team,a[inner+1].team)>0)   
{

team=a[inner];

a[inner]=a[inner+1];   
a[inner+1]=temp;   
}

printf(“\nPlayer name verage”);

printf(“\n~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~”);

i=0;

strcpy\*st,””+;   
while(i<n)   
{

If(strcmp(st),a[i].team)!=0)   
{

printf(“\n\n%s”,a\*i+͘team);   
printf(“\n~~~~~~~~~”);   
struct(st,a[i].team);   
}

else   
{

printf(“\n%-11s %7s”,a\*i+͘player,a\*i+͘avg);   
 i++;

}

}

getch();   
}

Function

3. Write a function that gets two integer and return divition. #include<stdio.h>

//#include<conio.h>

float Sum(int a,int b)   
{

return (float)a/b;   
}

void main()   
{

int x,y;

//clrcsr();

printf("Enter first number: "); scanf("%d",&x);

printf("Enter Second number: "); scanf("%d",&y);

printf("Sum of %d is %f",x,y,Sum(x,y));   
//getch();

}

4. Write a function that gets two integer and return maximum. #include<stdio.h>

//#include<conio.h>

int Max(int a,int b)   
{

if(a>b)

return a;   
else

return b;   
}

void main()   
{

int x,y;

//clrscr();

printf("Enter first number: "); scanf("%d",x);

printf("Enter Second number: ");   
 scanf("%d",y);

printf("Maximum= %d",Max(x,y));   
 //getch();

}

5. Write a function that gets two integers and return minimum. #include<stdio.h>

//#include<conio.h>

int Min(int a,int b)   
{

if(a<b)

return a;   
else

return b;   
}

void main()   
{

int x,y;

//clrscr();

printf("Enter first number: "); scanf("%d",x);

printf("Enter Second number: ");   
 scanf("%d",y);

printf("Maximum= %d",Min(x,y));

//getch();   
}

6. Write a function that gets length and width of a rectangle and return area. #include<stdio.h>

//#include<conio.h>

long RectArea(int l,int w)   
{

return (long)l\*w;   
}

void main()   
{

int length,width;

//clrscr();

printf("Length=");

scanf("%d",&length);   
printf("Width=");   
 scanf("%d",&width);

printf("Area=%ld",RectArea(length,width));   
//getch();

}

7. Write a function that gets radius of a circle and return area. #include<stdio.h>

//#include<conio.h>   
#include<math.h>

float Area(float r)   
{

return M\_PI\*r\*r;   
}

void main()   
{

float radius;

//clrscr();

printf("Radius= ");

scanf("%f",&radius);

printf("Area=%f",Area(radius));   
//getch();

}

8. Write a function that gets three numbers and return maximum. #include<stdio.h>

//#include<conio.h>

int Max(int a, int b, int c)   
{

if(a>b)   
{

if(a>c)

return a;   
else

return c;   
}

else   
{

if(b>c)

return b;   
else

return c;   
}

}

void main()   
{

int a,b,c;

//clrscr();

printf("a= ");

scanf("%d",&a);   
printf("b= ");   
 scanf("%d",&b);   
 printf("c= ");   
 scanf("%d",&c);

printf("Maximum=%d",Max(a,b,c));

//getch();   
}

9. Write a function that gets three number and return minimum. #include<stdio.h>

//#include<conio.h>

int Min(int a, int b, int c)   
{

if(a<b)   
{

if(a<c)

return a;   
else

return c;   
}

else   
{

if(b<c)

return b;   
else

return c;   
}

}

void main()   
{

int a,b,c;

//clrscr();

printf("a= ");

scanf("%d",&a);   
printf("b= ");   
 scanf("%d",&b);   
 printf("c= ");   
 scanf("%d",&c);

printf("Minimum=%d",Min(a,b,c));   
//getch();

}

10. Write a function that gets three numbers and return medium. #include<stdio.h>

//#include<conio.h>

int Mid(int a, int b, int c)   
{

if(a>b)   
{

if(a>c)   
{

if(b>c)

return b;

else

return c;   
}

else

return a;   
}

else   
{

if(b>c)   
{

if(a>c)

return a;   
else

return c;   
}

else

return b;   
}

}

void main()   
{

int a,b,c;

//clrscr();

printf("a= ");

scanf("%d",&a);   
printf("b= ");   
 scanf("%d",&b);   
 printf("c= ");   
 scanf("%d",&c);

printf("Midium=%d",Mid(a,b,c));   
//getch();

}

11. Write a function that gets any positive integer and return its factorial. #include<stdio.h>

//include<conio.h>   
long Fact(int n)   
{

int i;

long fact=1;

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

fact=fact\*i;

return fact;   
}

void main()   
{

int n;

//clrscr();

printf("Enter any positive integer: "); scanf("%d",&n);

printf("Factorial %d=%ld",n,Fact(n));   
//getch();

}

12. Write a function that gets any positive integer and return its digital sum. #include<stdio.h>

//#include<conio.h>

int Sum(int n)

{

int s=0;

while(n>0)   
{

s=s+n%10;   
n=n/10;

}

return s;   
}

void main()   
{

int n;

//clrscr();

printf("Enter any positive integer: "); scanf("%d",&n);

printf("Digital sum=%d",Sum(n));   
//getch()'

}

13. Write a function that gets any positive integer and returns digital root. #include<stdio.h>

//#include<conio.h>

int Sum(int n)

{

int s=0;

while(n>0)   
{

s=s+n%10;   
n=n/10;

}

return s;   
}

int Root(int n)   
{

while(n>9)

n=Sum(n);

return n;   
}

void main()   
{

int n;

//clrscr();

printf("Enter any positive integer: "); scanf("%d",&n);

printf("Digital root=%d",Root(n));   
//getch();

}

14. Write a function that gets any positive integer and return its reverse. #include<stdio.h>

//#include<conio.h>   
int Reverse(int n)   
{

int r=0;

while(n>0)   
{

r=r\*10+n%10;   
n=n/10;

}

return r;   
}

void main()   
{

int n;

//clrscr();

printf("Enter any positive integer: "); scanf("%d",&n);

printf("Reverse of %d= %d",n,Reverse(n));   
//getch();

}

15. Write a function that gets two positive integer and returns GCD (greatest common divisor). #include<stdio.h>

//#include<conio.h>   
int Gcd(int a, int b)   
{

int c;

while(a%b!=0)   
{

c=a%b;   
a=b;

b=c;

}

return b;   
}

void main()   
{

int a,b;

//clrscr();

printf("Enter a= ");   
scanf("%d",&a);

printf("Enter b= ");

scanf("%d",&b);

printf("Gcd= %d",Gcd(a,b));   
//getch();

}

16. Write a function that positive integer and returns LCM (least common multiple). #include<stdio.h>

//include<conio.h>

int Lcm(int a, int b)   
{

int i,l=1;

for(i=2;i<=a && i<=b;i++)   
{

while(a%i==0 && b%i==0)   
{

a=a/i;   
 b=b/i;   
 l=l/i; }

}

l=l\*a\*b;

return l;   
}

void main()   
{

int a,b;

//clrscr();

printf("a= ");

scanf("%d",&a);   
printf("b= ");   
 scanf("%d",&b);

printf("Lcm=%d",Lcm(a,b));   
//getch();

}

//write a function that gets two positive integers(a,b)and returns ato the power b. #include<stdio.h>

#include<math.h>

long int power(int a,int b)   
{

long int p=1;   
int i;

for(i=a; i<=b; i++)   
 p=p\*i;

return p;   
}

int main()   
{

int a,b;

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

printf("%d to the power %d=%.2f",a,b,power(a,b));   
return 0;

}

//19. write a function that gets two positive integers and returns nPr(permutation)// #include<stdio.h>

int nPr(int n,int r)   
{

long int p=n;   
int i;

n=5;

for(i=r+1; i<=n; p=p\*i++)   
 return p;

}

int main()   
{

int n,r;

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

printf("nPr=%d",nPr(n,r));   
return 0;

}

//write a function that gets two positive and returns nCr// #include<stdio.h>

long nCr(int n,int r)   
{

long p;   
int i;

if(n-r+1)

r=n-r;

p=1;

for(i=1; i<=r; p=p\*(p-i+1)/i,i++)   
 return p;

}

int main()   
{

int n,r;

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

printf("nCr=%ld",nCr(n,r));   
return 0;

}

//write a function thats gets an array and return sum// #include<stdio.h>

int tutul(int a[i],)   
{

int sum;

sum=sum+a[i];

printf("%d",sum); return sum;

}

int main()   
{

int a[10];

for(i=0; i<=10; i++)

scanf("%d",a[i]);   
tutul(a[i]);

return 0;   
}

//write a function thats gets an array and return sum//

#include<stdio.h>

int tutul(int a[],int n)   
{

int sum=0,i;

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

sum=sum+a[i];

return sum;   
}

int main()   
{

int a[12],i,n;

scanf("%d",&n);

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

scanf("%d",a[i]);

printf("%d",tutul(a,n));

return 0;

}

Write a program that a reads a programm array #include<stdio.h>

int main()

{

// int a[10],b[12],i,j,c;

int a[10],i,n=3,m=1,y;   
for(i=0; i<=2; i++)   
 scanf("%d",a[i]);   
//for(j=0; j<=15; j++)   
 //printf("%d",b[j]);   
//c=a[5]+b[6];

// printf("%d",c);

y=a[i];   
m=y/n;   
n=n+1;;

printf("average =%d",m);

return 0;

}

//write a function that gets an array amd reternsms average// #include<stdio.h>

float average(int a[],int n)   
{

int sum=0,i;

for(i=0; i<=n; i++)   
sum=sum+a[i];

return (float) sum/n;   
}

Void main()   
{

int i,n,a[100];

printf(" please enter an posive number"); scanf("%d",&n);

for(i=0; i<=n; i++)   
scanf("%d",&a[i]);

printf("average=%f",average(a,n);   
}

//write a programm that copy string // #include<stdio.h>

//#include<conio.h>

void copy(char st1[],char st2[])   
{

int i;

for(i=0; st2[i]; i++)   
 st1[i]=st2[i];

st1[i]=0;

}

void main()   
{

char st1[100],st2[100];

printf("enter forst string:");

}

write a runction that returns n'th finonacci number// #include<stdio.h>

long fibo(int)

{

int n;

if(n==0)

return 0;   
if(n==1)   
 return 1;

return fibo(n-1)+fibo(n-2);   
}

int main()   
{

int n;

printf("enter an positive integer:"); scanf("%d",&n);

printf("%d'dth fibonacci number is %ld",n,fibo(n));   
return 0;

}

//write a function that gets a string and returns its length// #include<stdio.h>

//#include<conio.h>   
int strlen(char st[])   
{

int l;

for(l=0; st[l]; l++)   
 return 1;

}

void main()   
{

char st[1000];   
//clrscr();

printf("enter an line text");   
gets(st);

printf("length=%d",strlen(st));

// getch();

}

//write a programm that read value and maximum value// #include<stdio.h>

int maximum(int a[],int n)   
{

int max,i;   
max=a[0];

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

scanf("%d",a[i]); if(a[i]>max)

max=a[i];   
return max;   
}

int main()   
{

int n,a[100],i;

scanf("%d",&n);

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

scanf("%d",a[i]);

printf(" maximum=%d",maximum(a,n));   
return 0;

}

//write a programm that read value and maximum value// #include<stdio.h>

int minimum(int a[],int n)   
{

int min,i;   
min=a[0];

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

scanf("%d",a[i]);

if(a[i]<min)   
min=a[i];   
return min;   
}

void main()   
{

int n,a[100],i;   
clrscr();

scanf("%d",&n);

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

scanf("%d",a[i]);

printf(" minimum=%d",minimum(a,n));

// getch();

}

//19. write a function that gets two positive integers and returns nPr(permutation)// #include<stdio.h>

int nPr(int n,int r)   
{

long int p=n;   
int i;

n=5;

for(i=r+1; i<=n; p=p\*i++)   
 return p;

}

int main()   
{

int n,r;

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

printf("nPr=%d",nPr(n,r));   
return 0;

}

//write a function that gets any positive integer and prime or not prime// #include<stdio.h>

#include<math.h>   
int isprime(long n)   
{

int i,t;   
if(n<2)

return 0;   
t=sqrt(n);

for(i=0; i<=t; i++)   
 if(n%i==0)

return 0;   
return 1;

}

int main()   
{

long n;

printf(" enter an positive number"); scanf("%ld",&n);

if(isprime(n)==1)

printf("prime");   
else

printf("not prime");

return 0;

}

//write a function that gets any poditive integer and teturns factorial// #include<stdio.h>

long fact(int n)   
{

if(n==0)

return 1;

return (long )n\*fact(n-1);   
}

int main()   
{

int n;

printf("enter any positive number:"); scanf("%d",&n);

printf("%d=%ld",n,fact(n));   
return 0;

}

//write a function thats a gets a string and revers alla characters// #include<stdio.h>

//#include<conio.h>   
void streev(char st[])   
{

int i,l;

char temp;

for(i=0; st[l]; l++)

for(i=0; i<l/2; i++)   
{

temp=st[i];

st[i]=st[l-i-1]=temp;   
}

}

void main()   
{

char st[100];

// clrscr();

printf("enter an line of text");   
gets(st);

streev(st);

printf("revers of the line es:%s",st);

// getch();

}

//write a function that searches any number// #include<stdio.h>

int search(int a[],int n,int item)   
{

int i;

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

if(a[i]==item)

return 1;

return 0;   
}

int main()   
{

int i,n,a[100],item;

printf("how many number:"); scanf("%d",&n);

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

scanf("%d",a[i]);

printf("enter an number to search");

scanf("%d",&n);

if(search(a,n,item)==1)   
 printf("forund");

else

printf("not found");   
return 0;

}

//write a function that sorts an array// #include<stdio.h>

#include<math.h>   
int sort(int a[],int n)   
{

int i,j,temp;

for(j=n-1; i>0; i--)

for(j=0; j<i; j++)

if(a[j]>a[j+1])   
{

temp=a[j];   
 a[j]=a[j+1];   
 a[j+1]=temp; }

void main()   
{

int i,a[100],r;

printf("how many number:"); scanf("%d",&n);

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

scanf("%d",&a[i]);   
sort(a,n);

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

printf("%4d",a[i]);   
getch();

}

}

Recursive Function

9.write a program that read two numbers and display minimum. #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

int \*a,\*b,\*min;

a=(int \*)malloc(sizeof(int));   
b=(int \*)malloc(sizeof(int));   
clrscr();

printf("a= ");

scanf("%d",a);

printf("b= ");

scanf("%d",b);   
if(\*a<\*b)

min=a;   
else

min=b;

printf("minimum= %d",\*min);   
getch();

}

10. write a program that read three numbers and display maximum. #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

int \*a,\*b,\*max,\*c;

a=(int \*)malloc(sizeof(int));   
b=(int \*)malloc(sizeof(int));   
c=(int \*)malloc(sizeof(int));   
clrscr();

printf("a= ");

scanf("%d",a);

printf("b= ");   
scanf("%d",b);   
printf("c= ");

scanf("%d",c);   
 if(\*a>\*b)

{

if(\*a>\*c)

max=a;   
else

max=c;   
}

else   
{

if(\*b>\*c)   
max=b;   
else

max=c;   
}

printf("maximum= %d",\*max);   
getch();

}

11. . write a program that read three numbers and display minimum. #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

int \*a,\*b,\*min,\*c;

a=(int \*)malloc(sizeof(int));   
b=(int \*)malloc(sizeof(int));   
c=(int \*)malloc(sizeof(int));   
clrscr();

printf("a= ");

scanf("%d",a);

printf("b= ");   
 scanf("%d",b);   
 printf("c= "); scanf("%d",c);   
 if(\*a<\*b)

{

if(\*a<\*c)

min=a;   
else

min=c;   
}

else   
{

if(\*b<\*c)   
min=b;   
else

min=c;   
}

printf("minimum= %d",\*min);   
getch();

}

12. write a program that read three numbers and display medium. #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

int \*a,\*b,\*c,\*mid;

a=(int \*)malloc(sizeof(int));   
b=(int \*)malloc(sizeof(int));   
c=(int \*)malloc(sizeof(int));   
clrscr();

printf("a= ");

scanf("%d",a);

printf("b= ");   
 scanf("%d",b);   
 printf("c= "); scanf("%d",c);   
 if(\*a>\*b)

{

if(\*a>\*c)   
 {

if(\*b>\*c)   
mid=b;   
else

mid=c;   
}

else

mid=a;   
}

else   
{

if(\*b>\*c)   
{

if(\*a>\*c)   
mid=a;   
else

mid=c;   
}

else

mid=b;   
}

printf("mideum= %d",\*mid);   
getch();

}

13. write a program that read two floating point numbers and display maximum.

#include<stdio.h>   
#include<stdlib.h>   
#include<conio.h>   
void main()

{

float \*a,\*b,\*max;

a=(float \*)malloc(sizeof(float));   
b=(float \*)malloc(sizeof(float));   
clrscr();

printf("a= ");

scanf("%f",a);

printf("b= ");   
scanf("%f",b);   
if(\*a>\*b)

max=a;   
else

max=b;

printf("maximum= %f",\*max);   
getch();

}

14. write a program that read two long numbers and display maximum #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>

void main()   
{

long \*a,\*b,\*max;

a=(long \*)malloc(sizeof(long));   
b=(long \*)malloc(sizeof(long));   
clrscr();

printf("a= ");

scanf("%ld",a);

printf("b= ");   
scanf("%ld",b);   
if(\*a>\*b)

max=a;   
else

max=b;

printf("maximum= %ld",\*max);   
getch();

}

15. . write a program that read two double numbers and display maximum #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

Double \*a,\*b,\*max;

a=(double \*)malloc(sizeof(double));   
b=(double \*)malloc(sizeof(double));   
clrscr();

printf("a= ");

scanf("%lf",a);

printf("b= ");   
scanf("%lf",b);   
if(\*a>\*b)

max=a;   
else

max=b;

printf("maximum= %lf",\*max);   
getch();

}

16. write a program that read two characters and display maximum.

#include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

char \*a,\*b,\*max;

a=(char \*)malloc(sizeof(char));   
b=(char \*)malloc(sizeof(char));

clrscr();

printf("a= ");

scanf("%c%\*c",a);   
 printf("b= ");

scanf("%c%\*c",b);   
if(\*a>\*b)

max=a;   
else

max=b;

printf("maximum= %c",\*max);   
getch();

}

17. write a program that read two string and display maximum #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
#include<string.h>   
void main()

{

char \*a,\*b,\*max;

a=(char \*)malloc(sizeof(char)\*30);   
b=(char \*)malloc(sizeof(char)\*30);   
clrscr();

printf("a= ");

scanf("%s",a);

printf("b= ");   
scanf("%s",b);   
if(strcmp(a,b)>0)   
strcpy(max,a):   
else

strcpy(max,b):

printf("maximum= %s",max);   
getch();

}

18. . write a program that reads any integer and display positive,negative or zero. #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
#include<string.h>   
void main()

{

int \*n;

n=(int \*)malloc(sizeof(int));   
clrscr();

printf(“enter any integer :”); scanf(“%d”,n);

if(\*n>0)

printf(“positive”);

else if(\*n<0)

printf(“negative”);   
else

printf(“zero”);   
getch();

}

19.write a program that read a digit and display by spelling. #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

int \*n;

n=(int \*)malloc(sizeof(int));   
clrscr();

printf("");

printf("enter any digit:"); scanf("%d",&n);

switch(\*n)

{

case 0:

printf("zero");   
break;

case 1:

printf("one");   
break;

case 2:

printf("two");   
break;

case 3:

printf("three");   
break;

case 4:

printf("four");   
break;

case 5:

printf("five");   
break;

case 6:

printf("six");   
break;

case 7:

printf("seven");   
break;

case 8:

printf("eight");   
break;

case 9:

printf("nine");   
break;

default:

printf("not a single digit");   
}

getch();   
}

20. write a program that reads any positive integer and display roman digit. #include<stdio.h>

#include<stdlib.h>   
#include<conio.h>   
void main()

{

int \*n,i;

n=(int \*)malloc(sizeof(int));   
clrscr();

printf("");

printf("enter any digit:"); scanf("%d",&n);

for(i=1;i<=\*n/1000;i++)   
 printf("M");

\*n=\*n%1000;   
switch(\*n/100)   
{

case 1:

printf("C");   
break;

case 2:

printf("CC");   
break;

case 3:

printf("CCC");   
break;

case 4:

printf("CD");   
break;

case 5:

printf("D");   
break;

case 6:

printf("DC");   
break;

case 7:

printf("DCC");   
break;

case 8:

printf("DCCC");   
break;

case 9:

printf("CM");   
break;

}

\*n=\*n%100;   
switch(\*n/10)   
{

case 1:

printf("X");   
break;

case 2:

printf("XX");   
break;

case 3:

printf("XXX");   
break;

case 4:

printf("XL");   
break;

case 5:

printf("L");   
break;

case 6:

printf("LX");   
break;

case 7:

printf("LXX");   
break;

case 8:

printf("LXXX");   
break;

case 9:

printf("XC");   
break;

}

\*n=\*n%10;   
switch(\*n)   
{

case 1:

printf("I");   
break;

case 2:

printf("II");   
break;

case 3:

printf("III");   
break;

case 4:

printf("IV");   
break;

case 5:

printf("V");   
break;

case 6:

printf("VI");   
break;

case 7:

printf("VII");   
break;

case 8:

printf("VIII");   
break;

case 9:

printf("IX");   
break;

}

getch();   
}

223------------234

////21.Write a program that read a positive integer and display its factorial. #include<stdio.h>

int main()

{

int n,i,f;

scanf("%d",&n);   
f=n;

for(i=n-1;i>0;i--)   
 f=f\*i;

printf("%d",f);   
return 0;

}

//22.Write a program that read any positive integer and display sum of its disits. #include<stdio.h>

int main()

{

int n,x,sum=0;

scanf("%d",&n); while(n!=0)

{

x=n%10;   
n=n/10;

sum=sum+x;   
}

printf("%d",sum);   
return 0;

}

//23.Write a program that reads and display an array. #include<stdio.h>

#include<stdlib.h>   
int main()

{

int \*a,i,n;

printf("How many numbers:"); scanf("%d");

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i)); for(i=0;i<n;i++)

printf("%4d",\*(a+i));   
return 0;

}

//24.Write a program that reads an array and display sum. #include<stdio.h>

#include<stdlib.h>   
int main()

{

int \*a,i,n,sum=0;   
//clrscr ;

printf("How many numbers:"); scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i));

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

sum=sum+\*(a+i);   
printf("sum=%d",sum);   
//getch ;

return 0;   
}

//25.Write a program that reads an array and display average . #include<stdio.h>

#include<stdlib.h>   
int main()

{

int \*a,i,n,sum=0;   
//clrscr ;

printf("How many numbers:"); scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i));   
for(i=0;i<n;i++)   
 sum=sum+\*(a+i);

printf("average=%d",sum/n);   
//getch ;

return 0;   
}

//26.Write a program that reads an array and display average .

#include<stdio.h>   
#include<stdlib.h>   
int main()

{

int \*a,i,n,sum=0;   
//clrscr ;

printf("How many numbers:"); scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i));   
for(i=0;i<n;i++)   
 sum=sum+\*(a+i);

printf("average=%d",(float)sum/n);   
//getch ;

return 0;   
}

//27.Write a program that reads an array and display maximum. #include<stdio.h>

#include<stdlib.h>   
int main()

{

int \*a,i,n,max;   
//clrscr ;

printf("How many numbers:");

scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i));   
max=\*a;

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

if(\*(a+i)>max)

max=\*(a+i);

printf("maximum=%d",max);   
//getch ;

return 0;   
}

//28.Write a program that reads an array and display minimum. #include<stdio.h>

#include<stdlib.h>   
int main()

{

int \*a,i,n,min;   
//clrscr ;

printf("How many numbers:"); scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i));

min=\*a;

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

if(\*(a+i)>min)

min=\*(a+i);

printf("minimum=%d",min);   
//getch ;

return 0;   
}

//29.Write a program that reads an array and search any given number . #include<stdio.h>

#include<stdlib.h>   
int main()

{

int \*a,i,n,item,found=0;   
//clrscr ;

printf("How many numbers:"); scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i));

printf("enter any number to searh:");   
 scanf("%d",&item);

for(i=0;i<n;i++)   
if(\*(a+i)==item)

{

found=1;   
break;

}

if(found==1)   
printf("found");   
else

printf("Not found");

//getch ;

return 0;   
}

//30.Write a program that reads an array and and sort them . #include<stdio.h>

#include<stdlib.h>   
int main()

{

int \*a,i,j,temp,n;   
//clrscr ;

printf("How many numbers:"); scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n); for(i=0;i<n;i++)

scanf("%d",(a+i)); for(i=n-1;i>0;i--)

for(j=0;j<i;j++)   
if(\*(a+j)>\*(a+j+1))   
{

temp=\*(a+j);

\*(a+j)=\*(a+j+1);

\*(a+j+1)=temp;   
}

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

printf("%4d",\*(a+i));

//getch ;

return 0;   
}

//31.Write a program that generates first n Fibonacci numbers. #include<stdio.h>

#include<stdlib.h>   
int main()

{

int i,n;   
long \*a;   
//clrscr ;

printf("How many numbers:"); scanf("%d",&n);

a=(long\*)malloc(sizeof(long)\*n);

\*a=0;

\*(a+1)=1;

for(i=2;i<n;i++)

\*(a+i)=\*(a+i-1)+\*(a+i-2);   
 for(i=0;i<n;i++)

printf("%10ld",\*(a+i));

//getch ;

return 0;   
}

//32.Write a program that convert a line to upper case. #include<stdio.h>

#include<string.h>   
#include<stdlib.h>   
int main()

{

char \*st;   
int i,l;

//clrscr ;

st=(char \*)malloc(sizeof(char)\*100);

printf("enter any line:");

gets(st);

l=strlen(st);

for(i=0;i<l;i++)

if(\*(st+i)>='a'&&\*(st+i)<='z')

printf("%c",\*(st+i)-32);   
else

printf("%c",\*(st+i));   
//getch ;

return 0;   
}

//33.Write a program that convert a line to lower case. #include<stdio.h>

#include<string.h>   
#include<stdlib.h>   
int main()

{

char \*st;   
int i,l;

//clrscr ;

st=(char \*)malloc(sizeof(char)\*100);

printf("enter any line:");

gets(st);

l=strlen(st);

for(i=0;i<l;i++)

if(\*(st+i)>='A'&&\*(st+i)<='z')

printf("%c",\*(st+i)-32);   
else

printf("%c",\*(st+i));

//getch ;   
 return 0; }

//34.Write a program that read your name and display every character with ine space. #include<stdio.h>

#include<string.h>   
#include<stdlib.h>   
int main()

{

char \*st;   
int i,l;

//clrscr ;

st=(char \*)malloc(sizeof(char)\*100);

printf("enter your name:");   
 gets(st);

l=strlen(st);

for(i=0;i<l;i++)

printf("%c",\*(st+i));   
//getch ;

return 0;   
}

//35.Write a program that read your name and display every character with ine space inreverse order. #include<stdio.h>

#include<string.h>   
#include<stdlib.h>   
int main()

{

char \*st;   
int i,l;

//clrscr ;

st=(char \*)malloc(sizeof(char)\*100);

printf("enter your name:");   
 gets(st);

l=strlen(st);

for(i=l-1;i>=0;i--)

printf("%c",\*(st+i));   
//getch ;

return 0;   
}

//36.Write a program that read any line of and text display every character in separate line. #include<stdio.h>

#include<string.h>   
#include<stdlib.h>   
int main()

{

char \*st;

int i,l;

//clrscr ;

printf("enter any line:");   
 gets(st);

l=strlen(st);

for(i=0;i<l;i++)

printf("\n%c",\*(st+i));   
//getch ;

return 0;   
}

//37.Write a program that read read any line of text and display every character with ASCII value in separate line.

#include<stdio.h>   
#include<string.h>   
#include<stdlib.h>   
int main()

{

char \*st;   
int i,l;

//clrscr ;

st=(char \*)malloc(sizeof(char)\*100);

printf("enter any line:");

gets(st);

l=strlen(st);

for(i=0;i<l;i++)

printf("\n%c%d",st[i],st[i]);   
//getch ;

return 0;   
}