/\*addition of n no by using factorial and recursion\*/

#include<stdio.h>

int fact(int);

int main()

{

int p,n;

printf("enter the value of n\n");

scanf("%d",&n);

p=fact(n);

printf("the result:%d",p);

return 0;

}

int fact(int x)

{

if(x==0||x==1)

return x;

else

return x+fact(x-1);

}

/\*even no using function\*/

#include<stdio.h>

int even(int);

int main()

{

int n,k;

printf("enter the value n\n");

scanf("%d",&n);

k=even(n);

if(k==2)

printf("even no");

else

printf("not even no");

return 0;n

}

int even(int x)

{

if(x%2==0)

return 2;

else

return 1;

}

/\*pattern printing 3\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2\*(2-i);j++)

printf(" ");

for(k=0;k<2\*i+1;k++)

printf("\*");

printf("\n");

}

return 0;

}

/\*pattern printing 3 even star \*/

#include<stdio.h>

int main()

{

int i,j,k,n;

printf("enter the value of n\n");

scanf("%d",&n);

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

{

for(j=0;j<n-i-1;j++)

printf(" ");

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

printf("\*");

printf("\n");

}

return 0;

}

/\*fivonacci series\*/

#include<stdio.h>

int fibo(int);

int main()

{

int n,p;

printf("enter the value of n\n");

scanf("%d",&n);

p=fibo(n);

printf("the result :%d",p);

return 0;

}

int fibo(int x)

{

if(x==0||x==1)

return x;

else

return (fibo(x-1)+fibo(x-2));

}

/\* pattern printing 1\*/

#include<stdio.h>

int main()

{

int n,i,j;

printf("enter the value of n\n");

scanf("%d",&n);

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

{

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

printf("\* ");

printf("\n");

}

return 0;

}

/\*gcd\*/

#include<stdio.h>

int main()

{

int a,b;

printf("enter two values\n");

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

while(a!=b)

{

if(a>b)

a=a-b;

else

b=b-a;

}

printf(" the gcd :%d",a);

return 0;

}

/\*pattern printing 4 even no of stars\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2-i;j++)

printf(" ");

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

printf("\* ");

printf("\n");

}

return 0;

}

/\*lcm\*/

#include<stdio.h>

int main()

{

int a,b,a1,b1,lcm;

printf("enter two values\n");

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

a1=a;

b1=b;

while(a!=b)

{

if(a>b)

a=a-b;

else

b=b-a;

}

printf(" the gcd :%d",a);

lcm=(a1\*b1)/a;

printf(" the lcm :%d",lcm);

return 0;

}

/\*pattern printing 4 even no of stars\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2\*(2-i);j++)

printf(" ");

for(k=0;k<i+1;k++)

printf("\* ");

printf("\n");

}

return 0;

}

/\*gcd using recurtion\*/

#include<stdio.h>

int gcd(int,int);

int main()

{

int x,y,p;

printf("enter two values\n");

scanf("%d%d",&x,&y);

p=gcd(x,y);

printf("gcd of %d and %d :%d",x,y,p);

return 0;

}

int gcd(int a,int b)

{

if(b!=0)

return (b,a%b);

else

return a;

}

/\*pattern printing 2 odd no of stars\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2-i;j++)

printf(" ");

for(k=0;k<2\*i+1;k++)

printf("\*");

printf("\n");

}

return 0;

}

/\*diamond without space\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2-i;j++)

printf(" ");

for(k=0;k<2\*i+1;k++)

printf("\*");

printf("\n");

}

{

for(i=2;i>0;i--)

{

for(j=0;j<3-i;j++)

printf(" ");

for(k=0;k<2\*i-1;k++)

printf("\*");

printf("\n");

}

return 0;

}

}

/\*pattern printing 3 even star \*/

#include<stdio.h>

int main()

{

int i,j,k,n;

printf("enter the value of n\n");

scanf("%d",&n);

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

{

for(j=0;j<n-i-1;j++)

printf(" ");

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

printf("\* ");

printf("\n");

}

return 0;

}

/\*diamond with space\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2\*(2-i);j++)

printf(" ");

for(k=0;k<2\*i+1;k++)

printf("\* ");

printf("\n");

}

{

for(i=2;i>0;i--)

{

for(j=0;j<2\*(3-i);j++)

printf(" ");

for(k=0;k<2\*i-1;k++)

printf("\* ");

printf("\n");

}

return 0;

}

}

/\*pattern printing 4 even no of stars\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2-i;j++)

printf(" ");

for(k=0;k<i+1;k++)

printf("\* ");

printf("\n");

}

return 0;

}

/\*pattern printing 2 odd no of stars with space\*/

#include<stdio.h>

int main()

{

int i,j,k;

for(i=0;i<3;i++)

{

for(j=0;j<2\*(2-i);j++)

printf(" ");

for(k=0;k<2\*i+1;k++)

printf("\* ");

printf("\n");

}

return 0;

}