**/\* Reverse a Number using while loop \*/**

#include <stdio.h>

int main()

{

int n, r = 0;

printf("Please enter a number: ");

scanf("%d",&n);

while (n > 0)

{

r = r \* 10;

r = r + n%10;

n = n/10;

}

printf("Reversed number is = %d: ", r);

return 0;

}

--------------------------------------------------------------

**/\* Reverse a Number using for loop \*/**

#include <stdio.h>

int main()

{

int n, r;

printf("Please enter a number: ");

scanf("%d",&n);

for(r=0;n>0;n=n/10)

{

r = r \* 10;

r = r + n%10;

}

printf("Reversed number is = %d: ", r);

return 0;

}

**/\* calculate power using while loop \*/**

#include<stdio.h>

int main()

{

int a, b, i, p;

printf("Enter value of a: ");

scanf("%d",&a);

printf("Enter value of b: ");

scanf("%d",&b);

p=1;

i=1;

while(i<=b)

{

p = p \* a;

i++;

}

printf("Power : %d",p);

return 0;

}

-----------------------------------------------------

**/\* Calculate power using for loop \*/**

#include<stdio.h>

int main()

{

int a, b, i, p;

printf("Enter value of a: ");

scanf("%d",&a);

printf("Enter value of b: ");

scanf("%d",&b);

p=1;

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

p = p \* a;

printf("Power : %d",p);

return 0;

}

**/\* Binary by recursion \*/**

#include<stdio.h>

void binary(long);

int main()

{

long n;

printf("Type a value : ");

scanf("%ld",&n);

binary(n);

return 0;

}

void binary(long n)

{

if(n>1)

binary(n/2);

printf("%ld",n%2);

}

**/\* Towers of Hanoi by recursion \*/**

#include<stdio.h>

void toh(int,char,char,char);

int main()

{

int n=3;

toh(n,'A','B','C');

return 0;

}

void toh(int n,char a,char b,char c)

{

if(n==1)

printf("\nMoved from %c to %c",a,c);

else

{

toh(n-1,a,c,b);

toh(1,a,' ',c);

toh(n-1,b,a,c);

}

}

**/\* GCD by recursion \*/**

#include<stdio.h>

int gcd(int,int);

int main()

{

int a,b;

printf("Type 2 values to find GCD :\n");

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

printf("GCD : %d",gcd(a,b));

return 0;

}

int gcd(int m,int n)

{

if(n>m) return gcd(n,m);

if(n==0) return m;

return gcd(n,m%n);

}

**/\* Sum of digit by recursion \*/**

#include<stdio.h>

int sod(int);

int main()

{

int i;

printf(" Type any value : ");

scanf("%d",&i);

printf("Sum of digit : %d",sod(i));

return 0;

}

int sod(int n)

{

if(n<1)

return 0;

return(n%10+sod(n/10));

}

**/\* Fibonacci by Recursion \*/**

#include<stdio.h>

int fib(int);

int main()

{

printf("Type any value : ");

printf("\nNth value: %d",fib(getche()-'0'));

return 0;

}

int fib(int n)

{

if(n<=1)

return n;

return(fib(n-1)+fib(n-2));

}