1. Write a C program to print even and odd numbers from 1-50 using while, for and do-while.

#include<stdio.h>

int main()

{

int i=1;

while(i<51)

{

if(i%2==0)

printf("%d = Even \n",i);

else

printf("%d = Odd \n",i);

++i;

}

return 0;

}

#include<stdio.h>

int main()

{

int i;

for(i=0;i<51;i++)

{

if(i%2==0)

printf("%d = Even \n",i);

else

printf("%d = Odd \n",i);

++i;

}

return 0;

}

#include<stdio.h>

int main()

{

int i=1;

do

{

if(i%2==0)

printf("%d = Even \n",i);

else

printf("%d = Odd \n",i);

++i;

}

while(i<51);

return 0;

}

1. Write a C program to find the largest number among ten

#include<stdio.h>

int main()

{

int c=0,d;

for (int i=1;i<=10;i++)

{

printf("Enter a value ");

scanf("%d",&d);

if(d>c)

c=d;

}

printf("The largest number among ten is %d",c);

return 0;

}

1. Write a C program to print the series 1 1 2 3 5 8 13 21 upto 150.

#include<stdio.h>

int main()

{

int i=1;

int j=1;

while((i<=150)||(j<=150))

{

printf("%d %d ",i,j);

i=i+j;

j=i+j;

}

return 0;

}

1. Write a C program to reverse a 3-digit integer.

#include<stdio.h>

#include<math.h>

int main()

{

int i;

printf("Enter a number ");

scanf("%d",&i);

int a,c=0;

int n= i,d=0;

while(n!=0)

{

a=n%10;

c=(c\*pow(10,d))+a;

n=(n-a)/10;

}

printf("The reverse of %d is %d",i,c);

return 0;

}

1. Write a C program to find the prime number.

#include<stdio.h>

int main()

{

int i, c=0;

printf("Enter a number");

int x;

scanf("%d",&x);

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

{

if(x%i==0)

{

c=1;

break;

}

}

if(c==0)

printf("Prime number");

else

printf("Not prime number");

return 0; }

1. Using while loop print even numbers between 1 and 25.

#include<stdio.h>

int main()

{

int i;

for(i=1;i<26;i++)

{

if(i%2==0)

printf("%d ",i);

}

return 0;

}

1. Write a program to calculate the sum of the first ‘n’ natural numbers. Note: Write three versions of the program. (using while, do -while and for loop).

#include<stdio.h>

int main()

{

int i,s=0,n;

printf("Enter value of n");

scanf("%d",&n);

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

{

s=s+i;

}

printf("The sum is %d ",s);

return 0;

}

#include<stdio.h>

int main()

{

int i=0,s=0,n;

printf("Enter value of n");

scanf("%d",&n);

while(i<=n)

{

s=s+i;

i++;

}

printf("The sum is %d ",s);

return 0;

}

#include<stdio.h>

int main()

{

int i=0,s=0,n;

printf("Enter value of n");

scanf("%d",&n);

do

{

s=s+i;

i++;

}

while(i<=n);

printf("The sum is %d ",s);

return 0;

}

1. Using while loop write a program that reads an integer until 999 is encountered. Also count the number of positive, negative and zeroes entered by the user.

#include<stdio.h>

int main()

{

int a,c=0,d=0,e=0;

printf("enter a number and if you enter 999 loop will terminate ");

scanf("%d",&a);

while(a!=999)

{

if (a<0)

d++;

else if(a>0)

c++;

else

e++;

scanf("%d",&a);

}

printf("The number of positive numbers are %d, negative numbers are %d and neutral number is %d",c,d,e);

return 0;

}

1. Write a program that inputs a positive integer number n and outputs the odd numbers between 1 and n.

For example, for n = 12, program should output:1 3 5 7 9 11

#include<stdio.h>

int main()

{

int a;

printf("enter a number to get odd numbers upto that value ");

scanf("%d",&a);

for(int i=0;i<=a;i++)

{

if (i%2==1)

printf("%d ",i);

}

return 0;

}

1. Write a program to calculate the factorial of a number using for loop.

#include<stdio.h>

int main()

{

int a,c=1;

printf("Enter a number ");

scanf("%d",&a);

for(int i=1;i<=a;i++)

{

c=c\*i;

}

printf("The factorial of this number is %d",c);

return 0;

}

1. Write a program to calculate the pow(x,y) , i.e. x^y using loop.

#include<stdio.h>

int main()

{

int a,b,c=1;

printf("Enter 2 numberS ");

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

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

{

c=c\*a;

}

printf("The power of this number is %d",c);

return 0;

}

1. Write a program to read a hexadecimal number. Calculate and display the decimal equivalent of this number.

#include<stdio.h>

int main()

{

int x;

printf("Enter a hexadecimal number ");

scanf("%x",&x);

printf("The decimal value equivalent to this is %d",x);

return 0;

}