A1. Check whether a given number can be expressed as the sum of two prime number

i/p

Enter a positive integer: 34

Output

34 = 3 + 31

34 = 5 + 29

34 = 11 + 23

34 = 17 + 17

NoofWays = 4

NoofWays=-1

// Online C compiler to run C program online

#include <stdio.h>

int main() {

int n,i,j,k,flag1=0,flag=0,count=0,num1,num2;

scanf("%d",&n);

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

{

flag=0;

flag1=0;

num1=i;

num2=n-i;

// printf("%d %d\n",num1,num2);

for(j=2;j<=num1/2;j++)

{

if(num1%j==0)

{ flag=1;

break;

}

}

for(k=2;k<=num2/2;k++)

{

if(num2%k==0)

{

flag1=1;

break;

}

}

if(flag==0 && flag1==0)

{

count=count+1;

// printf("Numbers are prime:\n");

// printf("%d %d \n", num1,num2);

}

}

if(count==0)

{

printf("Noofways%d",-1);

}

else

{

printf("NoofWays: %d",count);

}

return 0;

}