Day: 6 gcd greatest common divisor 25.12.2023

#include <stdio.h>

int main()

{

int n1, n2, i, gcd;

printf("Enter two integers: ");

scanf("%d %d", &n1, &n2);

for(i=1; i <= n1 && i <= n2; ++i)

{

// Checks if i is factor of both integers

if(n1%i==0 && n2%i==0)

gcd = i;

}

printf("G.C.D of %d and %d is %d", n1, n2, gcd);

return 0;

}

Day 7 all divisor of the number 26.12.2023

# include <stdio.h>

void main()

{

int i, n ;

printf("Enter the number : ") ;

scanf("%d", &n) ;

printf("\nThe divisors are :\n\n") ;

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

if(n % i == 0)

printf("%d\t", i) ;

}

Day : 8. 27.12.2023

#include <stdio.h>

int main() {

int n, i, flag = 0;

printf("Enter a positive integer: ");

scanf("%d", &n);

if (n == 0 || n == 1)

flag = 1;

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

if (n % i == 0) {

flag = 1;

break;

}

}

if (flag == 0)

printf("%d is a prime number.", n);

else

printf("%d is not a prime number.", n);

return 0;

}

Day :8. Armstrong number. 28.12.2023

#include <stdio.h>

int main() {

int num, originalNum, remainder, result = 0;

printf("Enter a three-digit integer: ");

scanf("%d", &num);

originalNum = num;

while (originalNum != 0) {

remainder = originalNum % 10;

result += remainder \* remainder \* remainder;

originalNum /= 10;

}

if (result == num)

printf("%d is an Armstrong number.", num);

else

printf("%d is not an Armstrong number.", num);

return 0;

}

Day : 9 palindrome number 29.12.2023

#include <stdio.h>

int main() {

int n, reversed = 0, remainder, original;

printf("Enter an integer: ");

scanf("%d", &n);

original = n;

// reversed integer is stored in reversed variable

while (n != 0) {

remainder = n % 10;

reversed = reversed \* 10 + remainder;

n /= 10;

}

if (original == reversed)

printf("%d is a palindrome.", original);

else

printf("%d is not a palindrome.", original);

return 0;

}

Day 10. 1.Square root. 30.12.2023

#include <math.h>

#include <stdio.h>

int main() {

double number, squareRoot;

printf("Enter a number: ");

scanf("%lf", &number);

squareRoot = sqrt(number);

printf("Square root of %.2lf = %.2lf", number, squareRoot);

return 0;

}

2. Perfect square

#include<stdio.h>

int main()

{

int i, number, flag=0;

printf("Enter a number: ");

scanf("%d", &number);

if(number == 1 || number == 0){

printf("%d is a Perfect Square.", number);

flag=1;

}

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

{

if(number == i\*i)

{

printf("%d is a Perfect Square.", number);

flag=1;

break;

}

}

if(flag == 0)

printf("%d is not a Perfect Square\n", number);

return 0;

}