***Example: User-defined function***

Here is an example to add two integers. To perform this task, we have created an user-defined addNumbers().

#include <stdio.h>

int addNumbers(int a, int b); // function prototype

int main()

{

int n1,n2,sum;

printf("Enters two numbers: ");

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

sum = addNumbers(n1, n2); // function call

printf("sum = %d",sum);

return 0;

}

int addNumbers(int a, int b) // function definition

{

int result;

result = a+b;

return result; // return statement

}

***HARDCORE HOW TO FIND PRIME NUMBER CODE***

**Example 1: No Argument Passed and No Return Value**

#include <stdio.h>

void checkPrimeNumber();

int main() {

checkPrimeNumber(); // argument is not passed

return 0;

}

// return type is void meaning doesn't return any value

void checkPrimeNumber() {

int n, i, flag = 0;

printf("Enter a positive integer: ");

scanf("%d",&n);

// 0 and 1 are not prime numbers

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

flag = 1;

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

if(n%i == 0) {

flag = 1;

break;

}

}

if (flag == 1)

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

else

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

}

**Example 4: Argument Passed and Returns a Value(MUCH BETTER)**

#include <stdio.h>

int checkPrimeNumber(int n);

int main() {

int n, flag;

printf("Enter a positive integer: ");

scanf("%d",&n);

// n is passed to the checkPrimeNumber() function

// the returned value is assigned to the flag variable

flag = checkPrimeNumber(n);

if(flag == 1)

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

else

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

return 0;

}

// int is returned from the function

int checkPrimeNumber(int n) {

// 0 and 1 are not prime numbers

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

return 1;

int i;

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

if(n%i == 0)

return 1;

}

return 0;

}