#include <stdio.h>

int main (){

return 0

}

**(i.)**

void countFrom100 (){

int count , square;

for(count = 100; count > 0 ; count--){

square = count \*count;

printf("%d\n", square);

}

}

**(iii.)**

void checkPrime(){

int n, i, flag = 0;

printf("Enter a positive integer: ");

scanf("%d", &n);

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

if (n % i == 0) {

flag = 1;

break;

}

}

if (n == 1) {

printf("1 is neither prime nor composite.");

}

else {

if (flag == 0)

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

else

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

}

}

**(iv.)**

void factorialNum(){

int n, i;

unsigned long long fact = 1;

printf("Enter an integer: ");

scanf("%d", &n);

// shows error if the user enters a negative integer

if (n < 0)

printf("Error! Factorial of a negative number doesn't exist.");

else {

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

fact \*= i;

}

printf("Factorial of %d = %llu", n, fact);

}

}

**(vi.)**

void checkAlphabets(){

char c;

int lowercase, uppercase;

printf("Enter an alphabet: ");

scanf("%c", &c);

// evaluates to 1 if variable c is lowercase

lowercase = (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u');

// evaluates to 1 if variable c is uppercase

uppercase = (c == 'A' || c == 'E' || c == 'I' || c == 'O' || c == 'U');

// evaluates to 1 if c is either lowercase or uppercase

if (lowercase || uppercase)

printf("%c is a vowel.", c);

else

printf("%c is a consonant.", c);

}

**(vii.)**

void findMultiplication(){

int number , i ,final;

printf("Enter a number to show Multiplication ");

scanf("%d", &number);

for(i = 1 ; i <= 12 ; i++){

final = number \* i

printf(" The Multiplication of %d \* %d = %d"\n, number, i,final);

}

}

**(ix.)**

void findProduct(){

int i , number;

int final = 1;

for(i = 0 ; i<8 ; i++){

printf("Enter a number that will be multiplied");

scanf("%d", &number);

if(number == 0){

continue;

}else{

final \*= number

}

}

printf("Your final answer is %d" , final);

}