#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);

}