```c
#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);
   }
}
```

```c
//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);
```

```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);


}
```

//x