

```
#include <stdio.h>
```

```
int main (){
```

```
    return 0  
}
```

1.

```
void countFrom100 (){  
    int count , square;  
    for(count = 100; count > 0 ; count--){  
        square = count *count;  
        printf("%d\n", square);  
    }  
}
```

3.

```
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);  
    }  
}
```

4.

```
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);
    }
}
```

6.

```
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);
}
```

7.

```
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);
    }
}
```

9.

```
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);

}
```

5.

```
#include <stdio.h>
int main ()
{
int i=50;
while (i<101)
{
printf("%d\n",i);
i++;i++;i++;i++;i++;i++;i++;i++;
}
return 0;
}
```

2.

```
#include <stdio.h>
int main()
{
int var;
for (var =1; var<=80; var ++ )
{
printf("var: %d\n", var);
if (var>=59)
{
break;
}
}
printf("loop ended");
return 0;
}
```