

Lab5

上机实践

1. 第三章课后习题10 (calculation.c)
2. 第三章课后习题12 (triangle.c)
3. 第三章课后习题16 (pi.c)
4. 第三章课后习题20 (palindrome.c)

读代码

1. For loop

```
#include <stdio.h>
int main()
{
    int num, count, sum = 0;

    printf("Enter a positive integer: ");
    scanf("%d", &num);

    // for loop terminates when num is less than count
    for(count = 1; count <= num; ++count)
    {
        sum += count;
    }

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

    return 0;
}
```

2. While Loop

```

#include <stdio.h>
int main() {
    int i = 1;

    while (i <= 5) {
        printf("%d\n", i);
        ++i;
    }

    return 0;
}

```

3. Do...while Loop

```

#include <stdio.h>
int main() {
    double number, sum = 0;

    // the body of the loop is executed at least once
    do {
        printf("Enter a number: ");
        scanf("%lf", &number);
        sum += number;
    }
    while(number != 0.0);

    printf("Sum = %.2lf", sum);

    return 0;
}

```