



## **Homework # 3**

**01286120 Elementary Systems Programming**

**Software Engineering Program**

**Faculty of Engineering, KMITL**

By

66010988 Cusson Laohaptanawong

Source code(Git link) :

<https://github.com/cussonspoon/HW3-for-rust.git>

Output :

1#

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin grade 0
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\grade.exe 0`
Failed with F
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin grade 50
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\grade.exe 50`
D
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin grade 70
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\grade.exe 70`
C
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin grade 99
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\grade.exe 99`
Excellent with A+
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin grade 150
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\grade.exe 150`
Invalid score
```

2#

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin cf 0 300 20
Finished dev [unoptimized + debuginfo] target(s) in 0.02s
Running `target\debug\cf.exe 0 300 20`
Fahr Celcius
0°F -17.8°C
20°F -6.7°C
40°F 4.4°C
60°F 15.6°C
80°F 26.7°C
100°F 37.8°C
120°F 48.9°C
140°F 60.0°C
160°F 71.1°C
180°F 82.2°C
200°F 93.3°C
220°F 104.4°C
240°F 115.6°C
260°F 126.7°C
280°F 137.8°C
300°F 148.9°C
```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin cf 0 280 40
Finished dev [unoptimized + debuginfo] target(s) in 0.02s
Running `target\debug\cf.exe 0 280 40`
Fahr Celcius
0°F -17.8°C
40°F 4.4°C
80°F 26.7°C
120°F 48.9°C
160°F 71.1°C
200°F 93.3°C
240°F 115.6°C
280°F 137.8°C
```

```

PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin cf 300 0 20
    Finished dev [unoptimized + debuginfo] target(s) in 0.02s
    Running `target\debug\cf.exe 300 0 20`
Fahr Celcius
300°F 148.9°C
280°F 137.8°C
260°F 126.7°C
240°F 115.6°C
220°F 104.4°C
200°F 93.3°C
180°F 82.2°C
160°F 71.1°C
140°F 60.0°C
120°F 48.9°C
100°F 37.8°C
80°F 26.7°C
60°F 15.6°C
40°F 4.4°C
20°F -6.7°C
0°F -17.8°C

```

## 3.1#

```

PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star1 0
    Finished dev [unoptimized + debuginfo] target(s) in 0.02s
    Running `target\debug\star1.exe 0`
PS D:\Software en work\Rust\Hw\hw3rust>

```

```

PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star1 1
    Finished dev [unoptimized + debuginfo] target(s) in 0.02s
    Running `target\debug\star1.exe 1`
*

```

```

PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star1 2
    Finished dev [unoptimized + debuginfo] target(s) in 0.02s
    Running `target\debug\star1.exe 2`
*
**
*

```

```

PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star1 3
    Finished dev [unoptimized + debuginfo] target(s) in 0.02s
    Running `target\debug\star1.exe 3`
*
**
***
**
*

```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star1 4
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star1.exe 4`
*
**
***
****
***
**
*
```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star1 5
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star1.exe 5`
*
**
***
****
*****
****
***
**
*
```

## 3.2#

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star2 0
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star2.exe 0`
PS D:\Software en work\Rust\Hw\hw3rust> |
```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star2 1
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star2.exe 1`
*
PS D:\Software en work\Rust\Hw\hw3rust> |
```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star2 2
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star2.exe 2`
*
**
*
PS D:\Software en work\Rust\Hw\hw3rust> |
```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star2 3
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star2.exe 3`
*
**
***
**
*
```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star2 4
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star2.exe 4`
*
**
***
****
****
***
**
*
```

```
PS D:\Software en work\Rust\Hw\hw3rust> cargo run --bin star2 5
  Finished dev [unoptimized + debuginfo] target(s) in 0.02s
  Running `target\debug\star2.exe 5`
*
**
***
****
*****
*****
****
***
**
*
```

All test results:

```
running 8 tests
test test_no_input_cf ... ok
test test_grade ... ok
test test_no_input_grade ... ok
test test_cf ... ok
test test_no_star ... ok
test test_no_star2 ... ok
test test_with_star ... ok
test test_with_star2 ... ok

test result: ok. 8 passed; 0 failed; 0 ignored; 0 measured; 0 filtered out; finished in 0.03s

PS D:\Software en work\Rust\Hw\hw3rust>
```