Rust Lab 19th

Follow the instructions provided in each exercise. There'll be hints in some exercises; they will be spelled backward so that you don't accidentally go into the hints.

If your computer doesn't have the Rust compiler installed, you can visit the website https://play.rust-lang.org/ and complete the exercises there.

Introduce Yourself

Print out your first and last name on the first line, your birthday on the second line, and your favorite food on the third line.

Requirement

- For your first and last name, you must use two separate `print` and `println` statements for first and last name separately.

Expected Output

```
My name is Ekkachai Saimai
12th January 2005
Steak
```

Volume Calculator

Calculate the volume of these geometric shapes: sphere, cylinder, and cone.

Code Template

```
fn main() {
    let sphere_radius = 1.0 /*can be changed*/;

    let cylinder_radius = 1.0 /*can be changed*/;
    let cylinder_height = 1.0 /*can be changed*/;

    let cone_radius = 1.0 /*can be changed*/;
    let cone_height = 1.0 /*can be changed*/;
}
```

Requirement

- The calculation must be based on the variables provided by the code template.
  Therefore, if the value assigned to the variable changes the output must change as well.

Expected Output

```
The volume of the sphere is 2.3
The volume of the cylinder is 9.2
The volume of the cone is 2.4
```

Speed Limit

Write a program determining whether the car is driving below, over, or within the speed limit. The minimum speed for the program is 40, and the maximum speed is 120.

Code Template

```
fn main() {
    let speed = 50 /*can be changed*/
}
```

Requirement

- When driving above the speed limit, the program should output "you are driving above the speed limit by {number} km/hr". You must replace the "{number}" with the number of speed it exceeded.
- The same goes for below the speed limit, output "you are driving below the speed limit by {number} km/hr".
- Otherwise, output "you are driving within the speed limit"

Expected Output (Below the Speed Limit Case)

```
you are driving below the speed limit by 12 km/hr
```

Expected Output (Within the Speed Limit Case)

```
you are driving within the speed limit
```

Expected Output (Above the Speed Limit Case)

```
you are driving above the speed limit by 24 km/hr
```

Hint

1. esle-fi esu ot deen uoy
2. devlovni esle-fi elpitlum eb thgim ereht
3. esle-fi rehtona edisni esle-fi na eb thgim ereht

Odd/Positive Number

Write a program that determines whether the number is odd or even and whether the number is positive or negative.

Code Template

```
fn main() {
    let number = 2 /*can be changed*/;
}
```

Expected Output (Number 5 case)

```
number 5 is a positive odd number
```

Expected Output (Number -2 case)

```
number -2 is a negative even number
```

Expected Output (Number 0 case)

```
number 0 is a positive even number
```

Hint

1. 2 yb elbisivid yltcefrep s'ti fi neve si rebmun eht
2. redniamer on htiw dedivid eb nac ti fi elbisivid yltcefrep si rebmun eht
3. ereh rotarepo oludom eht esu ot deen uoy
4. devlovni esle-fi elpitlum eb lliw ereht