

---

# 02101

## Indledende Programmering

### Hjemmeopgave 2

---

Nicklas T. Kiaer (s216137)

Oliver B. Brede (s214684)

Victor G. Flindt (s174822)

Danmarks  
Tekniske Universitet



## 1 Who made what?

Everyone has been a part of each program, discussing issues, solutions etc. The main responsibility for each program has been:

Exercise 1 - Oliver

Exercise 2 - Nicklas

Exercise 3 - Victor

## 2 Report of exercise 3

The main problems of the exercise was making sure the angle which is given in degrees wraps around and stays inside the interval  $[0-360]$ , this was done by using the modulo operator. The speed of the object needs to be in the interval of  $[0-20]$ , this however was done somewhat more forcefully with 2 if statements which make sure the parameter can't exceed the limits.

Another detail from the "move" method was the calculations of the respective X and Y position, this was handled with simple trigonometric functions, Cos for handling X direction and Sin for Y. Furthermore the angle (degrees) was converted to radians.

The `java.lang.Math` library was used utilized for the Cos, Sin and Pi functions.