

PGR 103 V2021
KANDIDAT 8069

OPPGAVE 2:

Først lagde jeg klassen EquipmentRegister for å opprette objektene av typen Ball eller TableTennisRacket. Disse objekter arver fra abstrakt klassen Equipment, som sier at alle objekter opprettet av typen Equipment burde ha med toString metoden. Gjennom polymorfism i Java kan de enkelt objekte klasser opprette sin egen toString metoden med å bruke @Override keyword, slik at den skriver ut riktig informasjon om denne objekt. For å teste det ut var det bare å opprette to objekter i main metoden av typen Ball og TableTennisRacket, også kalle på toString metoden for å se at den ble skrevet ut riktig.

OPPGAVE 4:

```
Welcome to Equipment Registry. Choose from menu:
```

```
1 = Show all equipment in registry
2 = Show balls that need air
3 = Show equipment that needs to be replaced
4 = Show table tennis rackets that need new pads
5 = End program
```

```
2
```

```
* * * Balls that need to be pumped with air * * *
```

```
Ball {Type= Football, needs air, Equipment ID 5, belongs in Locker 4, and does not need replacement.}
Ball {Type= Football, needs air, Equipment ID 3, belongs in Locker 1, and does not need replacement.}
Ball {Type= Football, needs air, Equipment ID 6, belongs in Locker 4, and does not need replacement.}
Ball {Type= Handball, needs air, Equipment ID 15, belongs in Locker 2, and needs a replacement.}
Ball {Type= Handball, needs air, Equipment ID 14, belongs in Locker 2, and needs a replacement.}
Ball {Type= Volleyball, needs air, Equipment ID 21, belongs in Locker 6, and does not need replacement.}
Ball {Type= Handball, needs air, Equipment ID 2, belongs in Locker 3, and does not need replacement.}
Ball {Type= Football, needs air, Equipment ID 12, belongs in Locker 1, and does not need replacement.}
Ball {Type= Basketball, needs air, Equipment ID 33, belongs in Locker 7, and does not need replacement.}
```

```
Welcome to Equipment Registry. Choose from menu:
```

```
1 = Show all equipment in registry
2 = Show balls that need air
3 = Show equipment that needs to be replaced
4 = Show table tennis rackets that need new pads
5 = End program
```

```
3
```

```
* * * Equipment that needs replacement * * *
```

```
Ball {Type= Handball, needs air, Equipment ID 15, belongs in Locker 2, and needs a replacement.}
Ball {Type= Handball, needs air, Equipment ID 14, belongs in Locker 2, and needs a replacement.}
Table Tennis Racket {Pad in good condition, Equipment ID 17, belongs in Locker 5, and needs a replacement.}
Ball {Type= Basketball, does not need air, Equipment ID 34, belongs in Locker 7, and needs a replacement.}
```

```
Welcome to Equipment Registry. Choose from menu:
```

```
1 = Show all equipment in registry
2 = Show balls that need air
3 = Show equipment that needs to be replaced
4 = Show table tennis rackets that need new pads
5 = End program
```

```
4
```

```
* * * Tennis Rackets that need new pads * * *
```

```
Table Tennis Racket {Needs pad replaced, Equipment ID 18, belongs in Locker 5, and does not need replacement.}
```