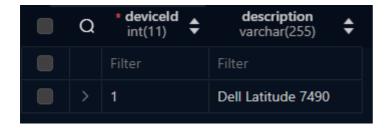# jpa_jakarta_onetable_v2.pdf

Task1

Task2

```java
public void getDevice(int id) {
        EntityManager em = emf.createEntityManager();
        em.getTransaction().begin();

        Device device = em.find(Device.class, id);
        System.out.println(device);

        em.getTransaction().commit();
        em.close();
    }
```

```
Hibernate: select d1_0.deviceId,d1_0.description from DEVICE d1_0 where d1_0.deviceId=?
Device [deviceId=1, description=Dell Latitude 7490]
```

Task3

```java
    public boolean updateDeviceDescription(int id, String description) {
        EntityManager em = emf.createEntityManager();
        em.getTransaction().begin();

        Device device = em.find(Device.class, id);
        if (device == null) {
            em.getTransaction().commit();
            em.close();
            return false;
        }

        Device newDevice = new Device(description);
        newDevice.setDeviceId(device.getDeviceId());

        em.merge(newDevice);
        em.getTransaction().commit();
        em.close();
```

```
            return true;
        }
```

```
Hibernate: update DEVICE set description=? where deviceId=?
Hibernate: select d1_0.deviceId,d1_0.description from DEVICE d1_0 where d1_0.deviceId=?
Device [deviceId=1, description=Dell Latitude 7490 - updated]
```

	Q	* deviceId int(11)	description varchar(255)	
		Filter	Filter	
	>	1	Dell Latitude 7490 - updated	

Task4

```
    @Id
        @GeneratedValue(strategy=GenerationType.IDENTITY)
        @Column(name="deviceId", nullable=false)
        private int deviceId;
```

Task5

```java
        public void deleteDevice(int id) {
            EntityManager em = emf.createEntityManager();
            em.getTransaction().begin();

            Device device = em.find(Device.class, id);
            if (device != null) {
                em.remove(device);
            }

            em.getTransaction().commit();
            em.close();
        }
```

```
Hibernate: delete from DEVICE where deviceId=?
Hibernate: select d1_0.deviceId,d1_0.description from DEVICE d1_0 where d1_0.deviceId=?
null
```