

# $\Delta V$ in rocketry calculator

First Java project

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# What have i created?

- Create rocket from parts
  - Engine
  - Stage
  - Rocket
- Use example rockets to make calculations;
- Check  $\Delta V$  of the rocket



# Interface

Choose options:

- 0: test rockets
- 1: create your own engine
- 2: create your own stage
- 3: create new one-stage rocket
- 4: add one stage to a rocket
- 5: check delta v of the saved rocket
- 1: exit application

Saturn V DeltaV for every stage:

Stage 0: 0.0  
Stage 1: 6953.527  
Stage 2: 5161.5913  
Stage 3: 3395.294  
Whole rocket DeltaV=15510.412

Tesla DeltaV for every stage:

Stage 0: 0.0  
Whole rocket DeltaV=0.0

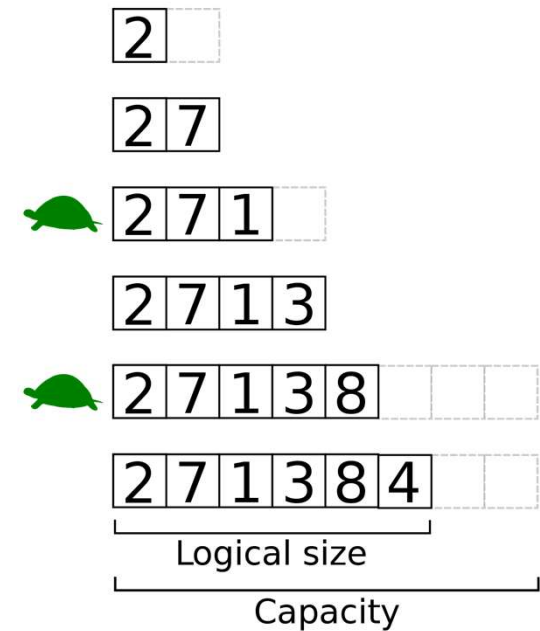
Reversed Saturn V DeltaV for every stage:

Stage 0: 6540.521  
Stage 1: 686.8887  
Stage 2: 154.55663  
Stage 3: 0.0  
Whole rocket DeltaV=7381.9663



# My problems

- Java
- Dynamic allocation of memory



# What did i learn

- Java is not so bad :D

# What can be improved

- Specification of whole rocket (it is halfway done)
- Thrust factor
  - Operation time
  - TWR
- Dynamic allocation of the memory

# Images source

- Wikipedia