



# Binaire getallen

Hoe praten computers?



# Wie zijn wij?

- Linda van der Pal
- Marcel Koning
- Danielle Hubert
- Ronald Hubert
- Huili See



# Wat gaan we doen?

- Hoe communiceer je met computers?
- Computers kunnen eigenlijk maar twee dingen heel goed

# Twee groepen

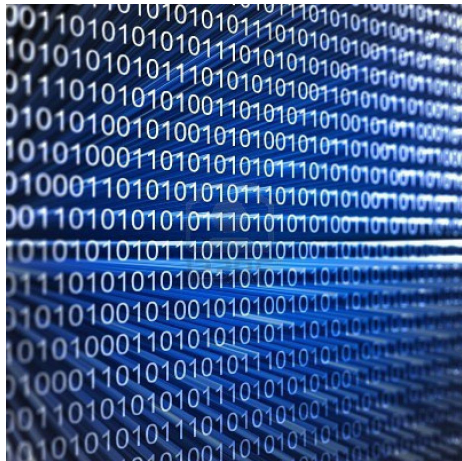


Een sleutelhanger met  
een geheime code  
maken...

Een menselijke robot  
programmeren...

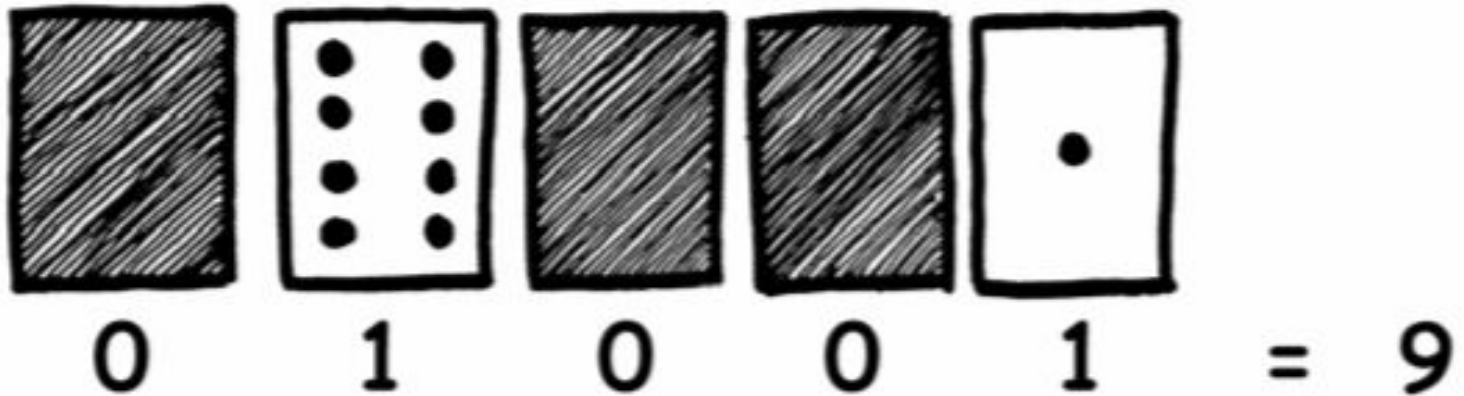


# Wat weet je al?



# Count the dots...

Een getal maken met nullen en enen





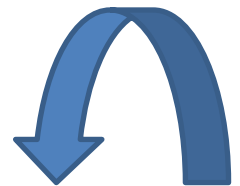
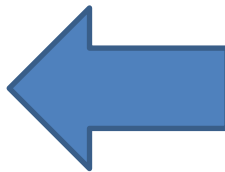
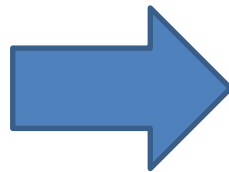
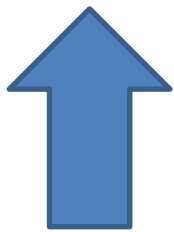
# 1 byte = 8 bits 😊

- Van getal naar een letter
- A = 65. Hoe onthoudt een computer dat?
- C = 67. Wie?
- Tip: werk van links naar rechts...

128	64	32	16	8	4	2	1	Getal	Letter
0	1	0	0	0	0	0	1	65	A

# De Robot

- Hoe praat je tegen een computer?
- Wie heeft wel eens een robot gezien?
- De Instructies van onze Robot

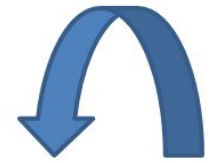
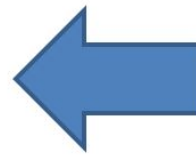
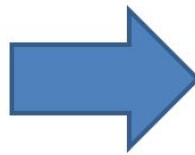
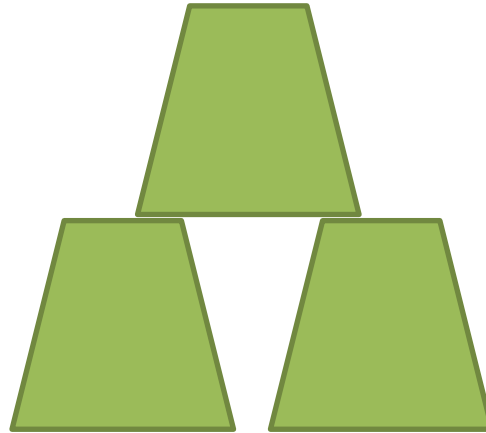




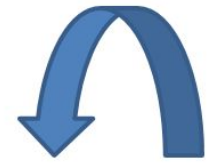
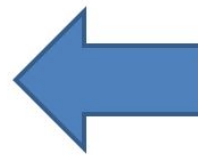
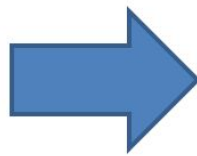
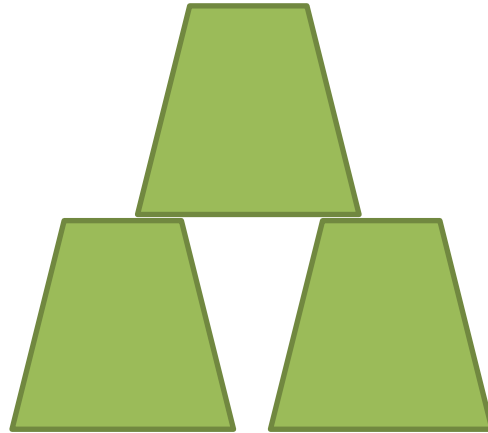


# Robot, go!

- Robot, maak de volgende vorm!



# Robot, go!

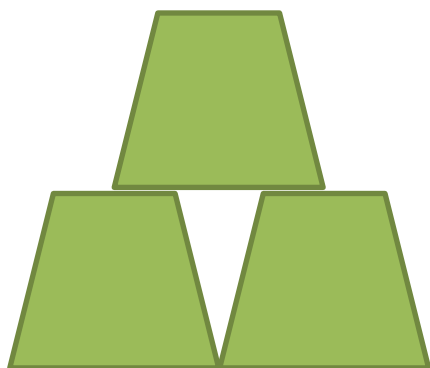




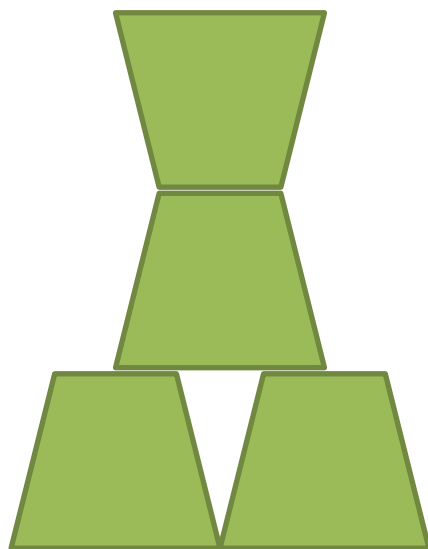
# Robot, go!

- Maak tweetallen
- Maak een programma
- Ben je klaar om te proberen?
  - Laat je algoritme aan mij zien
- Een ander tweetal gaat je programma testen

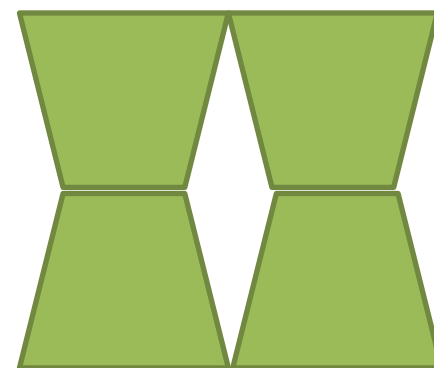




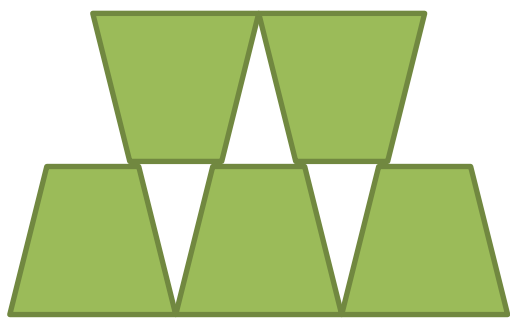
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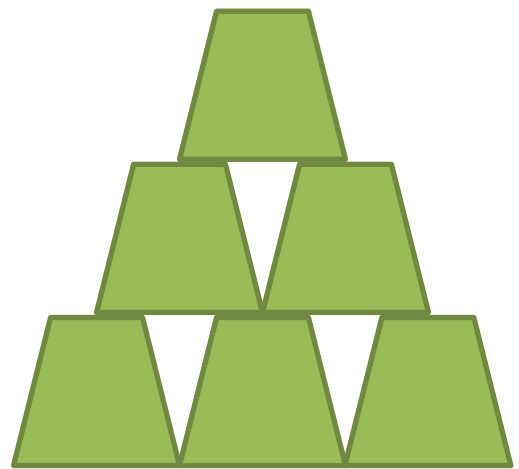
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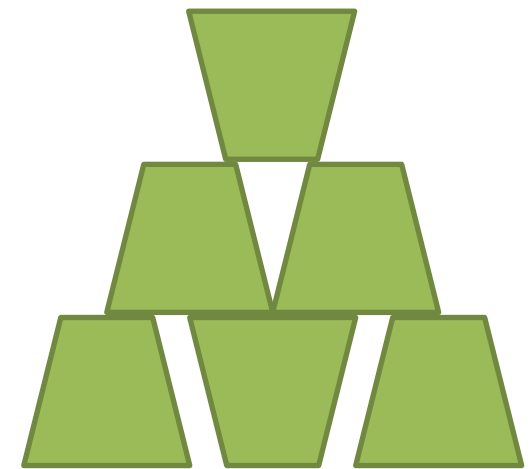
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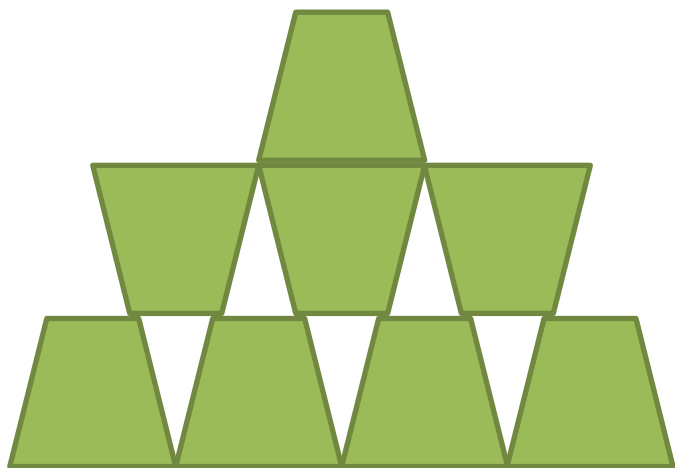
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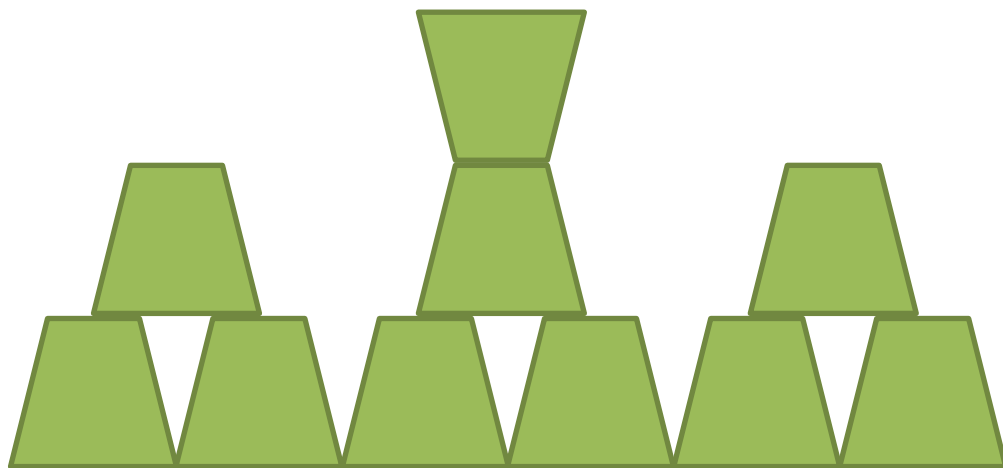
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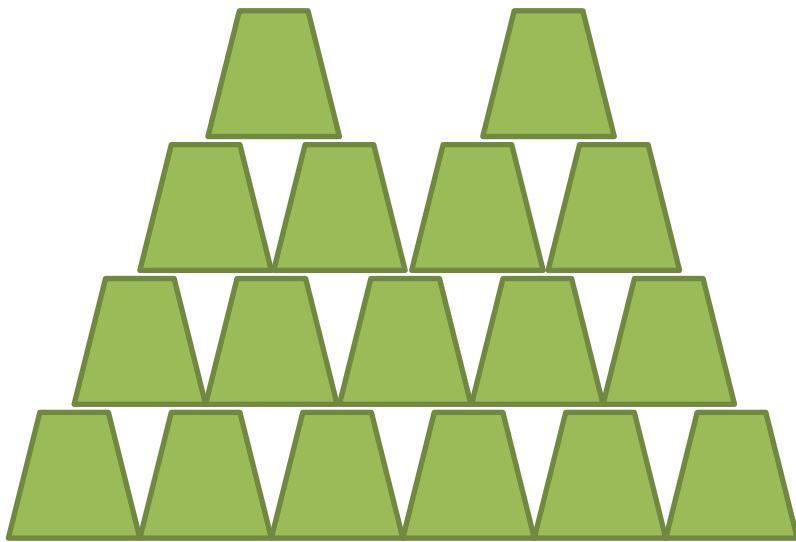
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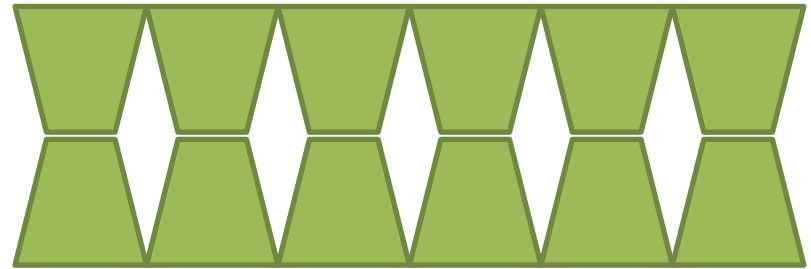
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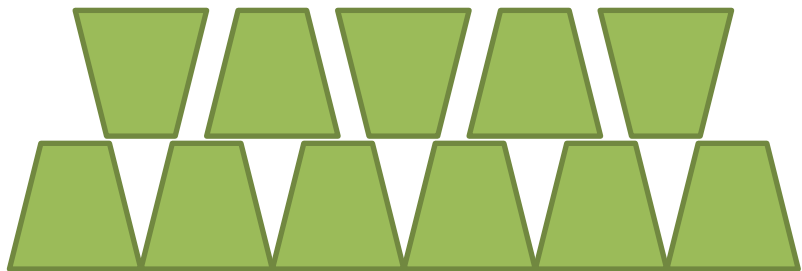


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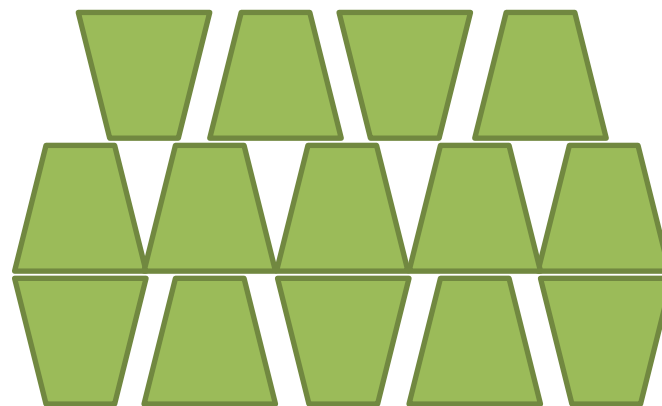


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