P T H I N K F A S T S

Competitive Programming

From Problem 2 Solution in O(1)
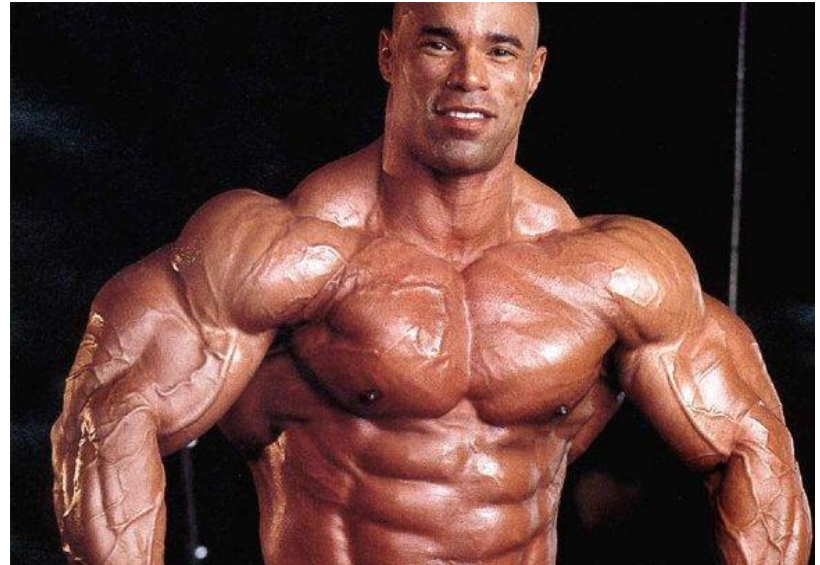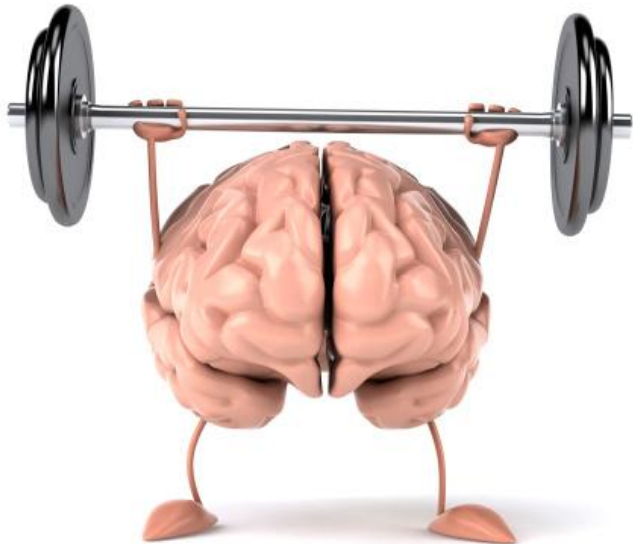
ICPC Training
Secrets of Success - 1
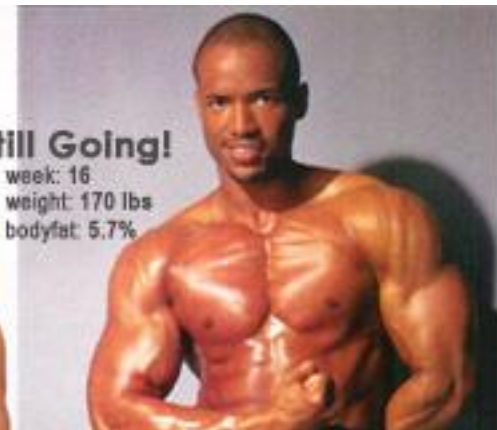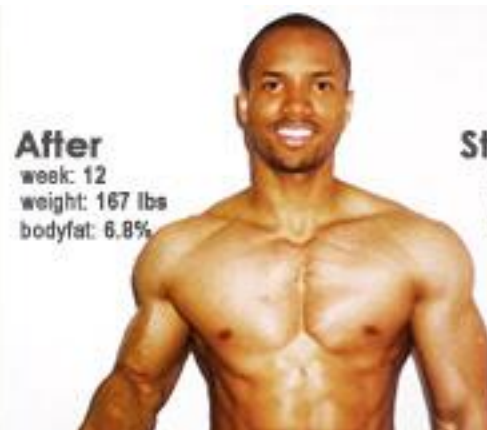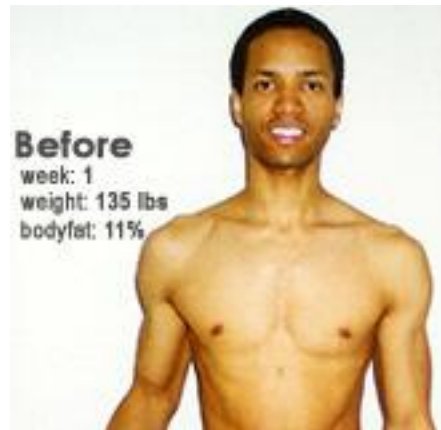
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Building the muscles

BodyBuilding Secrets

BodyBuilding Secrets

- Do you think
  - **anyone** can get such strong body?
  - you can get strong body with **little hours** of training?
  - you can get strong body with **improper** [nutrition]?
- Do you start your **1st training** with a Bench Press of **100kg**? 50kg? 10 kg?
- What will happen if you insist on doing a **heavy weight** for you?
- If you can do now 20kg, what is your **next weight**? 30kg? 90 kg?

BodyBuilding Secrets

- Think in 2 persons training ...
- First one (train X hours)
  - Select the **right time** (e.g. being active & have passion)
  - Follow specific programs with **certain goals**.

  - The program grow up **sequentially** (e.g. try 10kg, when good try 20kg..too heavy? try 15kg..then later 20kg?
  - Follow a program for **nutrition** strictly
  - S\He ask for tips and advices and **make use** of them.
  - Build **helpful environments** (e.g. friends to train with)
  - **Revise** his performance..**recognize** the problems
  - His eyes on the **stars**..do his best to **catch** them

BodyBuilding Secrets

- Second one (**also** train X hours)
  - Train anytime … regardless tired or not tired
  - No specific programs … or have plan but ignore it
  - Try things **above his limits**...and be disappointed for that
  - Eat whatever!
  - When get some tips and advices..rarely use them.
  - Training alone and feel bad about that
  - Keep comparing himself to others!

  - Raising up **negative feelings** (I am weak..I will never be like them...I am hopeless)
  - No helpful environment

BodyBuilding Secrets

- Think in 2 persons training ...
- First one:
  - After s/he finished level 1 (say 10 kg / 10 times), switched to higher weights (say 20 kg)...and so on..gaining bigger muscle , but doing the exercise for little times!
- Second one
  - After he finished level 1 (say 10 kg), switched to higher weights too. Meanwhile, he put some time for the lower weight training but with new **different goals**? e.g. doing the Bench Press for **50 times instead of 15**...and so on
- It is matter of muscle **strength** vs muscle **size**

BodyBuilding Secrets

- Every exercise train a certain muscle
  - However it affects other muscles too with some degree
  - If you want to specific muscle, train for it
- If you left training...your level goes down!
- Most of the people don't go to Gym, although many know how beneficial
- Those who don't go, still alive and practice their life :)

BodyBuilding Secrets

- We can train **reasonably** (left image) and be very good and fit with **life needs**?

- We can also train **exceptionally** (right image). Our skills will be much stronger...life doesn't need that (e.g. TopCoder Div1-1000 problems)...but some of us find that much fun!
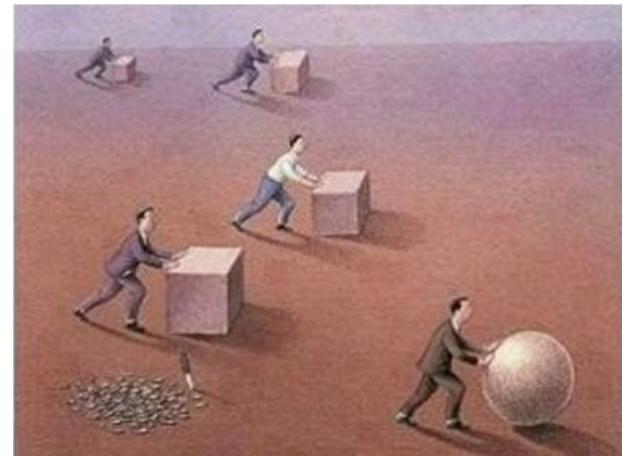
Take Home Message

Practice makes perfect

10000 Hours of Practice

Take Home Message

Train Smart not just Hard

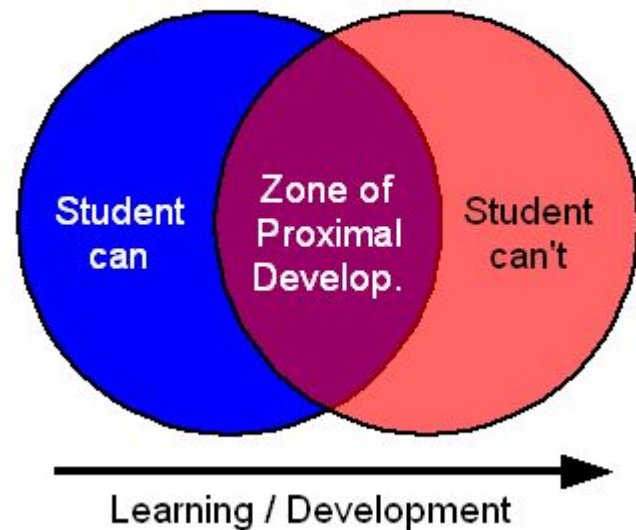Or Practice may <u>not</u> make perfect

Take Home Message

Being random in your training
   solving without clear vision and goals
      is much waste of time

Take Home Message

Select the right challenge level
and grow incrementally

Take Home Message

When you move to a higher level
    new training should still include lower levels
        but with different targets (e.g. speed)

Take Home Message

2 Mutually Exclusive Training Goals
     Reasonably to fit with career needs
       Or Exceptionally for fun, hobby, …
       Both are fine!

Take Home Message

If you stopped the training (e.g. for study/exams)
your level will go down
better is little train to
maintain your level

Take Home Message

Avoid negative feelings

You can do it...Like Others!

Raise up your challenge spirit

Take Home Message

Analog of **body** building to **mind** building
can help answering many training questions

تم بحمد الله

علمكم الله ما ينفعكم

ونفعكم بما تعلمتم

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