

In [4]:

```

from random import choice
import random

class Question:
    def __init__(self, prompt, answer):
        self.prompt = prompt
        self.answer = answer

question_prompts = open("crg.txt", "r")
content = question_prompts.read()

questions = [
    Question(content[1:355], "a"),
    Question(content[355:684], "b"),
    Question(content[684:1019], "c"),
    Question(content[1019:1259], "a"),
    Question(content[1259:1541], "a"),
    Question(content[1541:2008], "b"),
    Question(content[2008:2355], "a"),
    Question(content[2355:2679], "c"),
    Question(content[2679:2891], "c"),
    Question(content[2891:3289], "b"),
]
random.shuffle(questions)

def run_quiz(questions):
    score = 0
    for question in questions:
        answer = input(question.prompt)
        if answer == question.answer:
            score += 1
    print("you got", score, "out of", len(questions))
run_quiz(questions)

```

Q. Define: Continuous traits

- a) "either-or" traits with no intermediary forms
- b) the basic units of biological information
- c) traits which show intermediary forms
- d) an observable characteristic

1

Q. Define: Pure-breeding lines

- a) an observable characteristic
- b) families producing offspring carrying specific parental traits that remain constant across generations
- c) the probability of two or more independent events occurring together is the product of their probabilities
- d) traits which show intermediary forms

a

Q. Define: Dominant trait

- a) two alleles for a trait separate during gamete formation then reunite randomly at fertilization
- b) the trait that remains hidden in the offspring of pure-breeding parental strains with antagonistic phenotypes
- c) the trait that appears in the offspring of pure-breeding parental strains with antagonistic phenotypes
- d) families producing offspring carrying specific parental traits that remain constant across generations

a

Q. Define: Heredity

- a) the way genes transmit physiological and behavioural traits from parents to offspring
- b) individuals having two different alleles for a single trait
- c) cross between parents differing only in one trait
- d) the probability of either of two mutually exclusive events occurring is the sum of their probabilities

a

Q. Define: Genetics

- a) traits which show intermediary forms
- b) offspring of genetically dissimilar parents
- c) the science of heredity
- d) the way genes transmit physiological and behavioural traits from parents to offspring

a

Q. Define: Genotype

- a) traits which show intermediary forms
- b) the actual alleles present in an individual
- c) the probability of two or more independent events occurring together is the product of their probabilities
- d) "either-or" traits with no intermediary forms

a

Q. Define: Discrete traits

- a) the trait that remains hidden in the offspring of pure-breeding parental strains with antagonistic phenotypes
- b) traits which show intermediary forms
- c) "either-or" traits with no intermediary forms
- d) the trait that appears in the offspring of pure-breeding parental strains with antagonistic phenotypes

a

Q. Define: Sum rule

- a) the probability of either of two mutually exclusive events occurring is the sum of their probabilities
- b) the trait that remains hidden in the offspring of pure-breeding parental strains with antagonistic phenotypes
- c) offspring of genetically dissimilar parents
- d) the science of heredity

a

Q. Define: Monohybrids

- a) the trait that appears in the offspring of pure-breeding parental strains with antagonistic phenotypes
- b) the science of heredity
- c) individuals having two different alleles for a single trait
- d) the way genes transmit physiological and behavioural traits from parents to offspring

a

Q. Define: Phenotype

- a) the trait that remains hidden in the offspring of pure-breeding parental strains with antagonistic phenotypes
- b) the trait that appears in the offspring of pure-breeding parental strains with antagonistic phenotypes
- c) the probability of two or more independent events occurring together is the product of their probabilities
- d) an observable characteristic

a

you got 4 out of 10