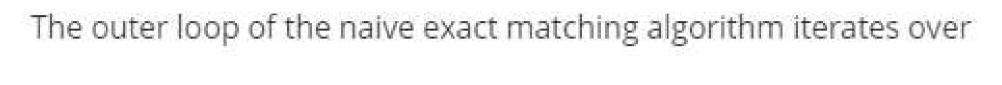
At what offset does TAC occur in GATTACA?

3

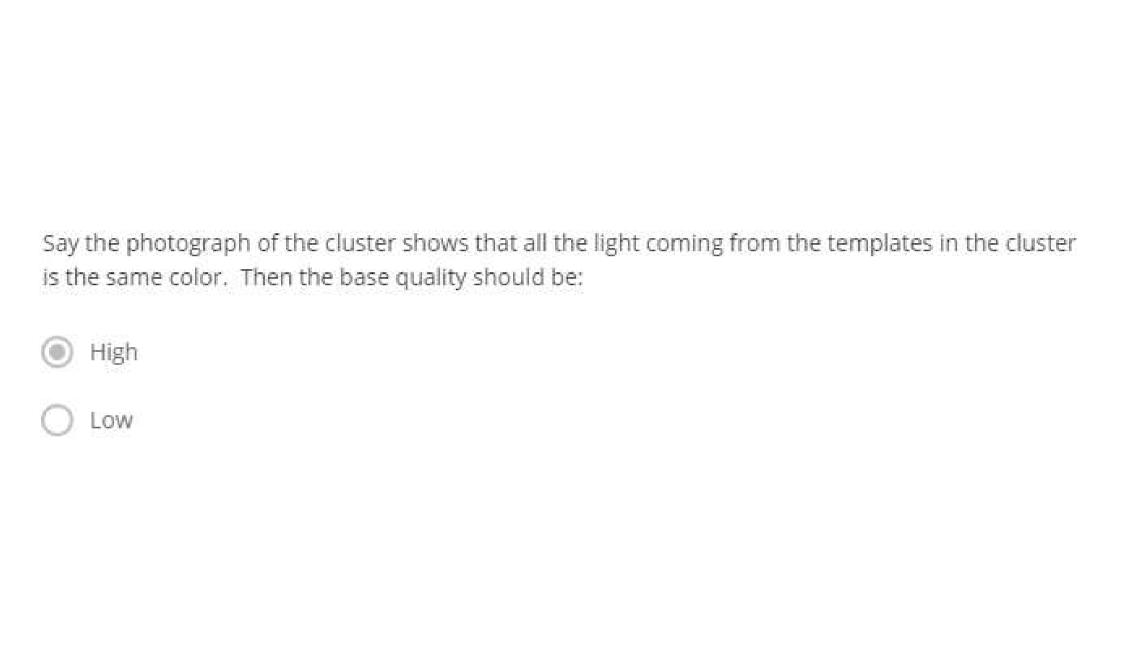


- Alignments
- Characters
- Patterns
- Reads

The character I (capital i) has ASCII value 73. Assuming Phred+33 encoding, what is the corresponding base quality?

40





Another purpose of the terminator is to

- glow a particular color corresponding to the base
- prevent non-complimentary bases from being integrated
- keep the template strand from breaking into pieces



One purpose of the terminator is to

- remove bases from the template
- keep the templates in sync
- allow multiple bases to be incorporate per cycle



A typical second-generation sequencing read is

- 10s of bases long
- 100s of bases long
- 1,000s of bases long
- millions of bases long

In the	puzzle analogy, using the picture of the completed puzzle as guide is analogous to using for finding where reads originate:
(iii) a	reference genome
(a	DNA sequencer
() a	strand of DNA
() a	gene
~	Correct

How many different suffixes does a string of length n have? Assume empty string doesn't count as a suffix.

- n
- () n + 1
- 2n

Which of the following is not a suffix of GATTACA?

- CA
- TTACA
- GATT
- A

Second-generation sequencing started to be used

- before the human genome project
- after the human genome project

Second-generation sequencing started to be used

- before the human genome project
- after the human genome project



Correct

The Human Genome Project ended around 2003, and second-generation sequencing arrived around 2005-2007 or so

How similar are the sequences of two genomes from unrelated humans?

- 99.8-99.9%
- 0 100%
- 95-99%
- 75-90%



The enzyme that incorporates complementary bases, making a single-stranded template into a double-stranded molecule, is called:
○ kinase
○ ligase
O helicase
polymerase

If we're studying sequencing data from a genome that has never been sequenced, what kind of computational method is most appropriate?
de novo assembly
Ocompression
Opolymerization
O read alignment

How many character comparisons occur when matching P = AAA to T = AAATAA?

- (0)
- 0.6
- O 3
- () 12

What is the base at offset 5 of GATTACA? Remember: the leftmost base has offset 0.

- (A
- (ii) (ii)
- () G
- О т