What does the term “encapsulation” mean in object-oriented design?

Why is encapsulation important?

What could happen if a design didn’t properly encapsulate knowledge?

Could you sketch out an example of a well-encapsulated class?

In object-oriented design, what does “cohesion” mean?

Can you give an example of a cohesive class?

How could you spot that a class is lacking cohesion?

How would you convert a string to an integer value in your language?

What happens if you try this on a string that doesn't contain a valid integer value?

How would you convert an integer value to a string in your language?

In your language, how would you find the number of occurrences of a specific letter character in a given string?

How would you do this in a case-insensitive way, so that the string “Clean code” would be seen as having two occurrences of the letter “C”, regardless of the case.

How would you find out if a given string is a a palindrome (“radar”, “level”, “madam” etc)?

Sketch out the process you'd use.

How would you deal with phrases that include punctuation, such as “Go hang a salami, I'm a lasagna hog”

In the unit test framework you use, if you have a number of tests that rely on the same setup, how do you remove the duplication so that the setup is common?

What's an example of an appropriate situation to throw an exception?

What different types of exception exist built-in in your language?

How would you define your own exception type?