print in perl doesn't include what?

A newline character.

List the variable type syntax.

- \$ scalar@ array
- % hash
- & subroutine
- * typeglob

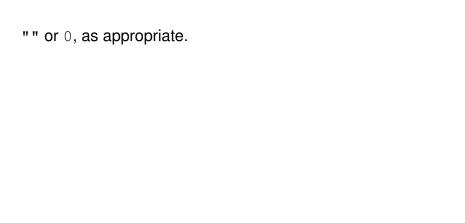
What's the difference between double, single quotes, and back ticks?

Double quotes perform variable interpolation and backslash

interpretation. Single quotes do not.

Back ticks capture the output from executing a command.

What are the default values?



How are scalar values interpreted?

As the expected type, depending on context.

What context do double quotes provide?

Assignment to arrays/hashes?

interpolative context

list context

Create a list using literal syntax.

Unpack that list.

```
@threeprimes = (2, 3, 5);
($a, $b, $c) = @threeprimes;
```

Index an array.

Update an array.

Either involves a scalar so use \$ not @.

```
$1st[n] = new_el
print $1st[n]
```

Create a hash using literal syntax.

```
@birthmonths = (
    "John" => "February",
    "Mary" => "March",
);
```

Arrows are just a nicer way of writing more arrows.

Look up an element in a hash.

Update a hash.

```
$hash{"key"}
$hash{"key"} = val
```

As with arrays, notice the use of \$ when dealing with individual elements.

Describe the Perl noun/verb analogy.

Nouns can be singular (scalars) or plural (arrays and hashes). Verbs can be procedures or functions.

Run some perl straight from the terminal.

Run some perl stored in a file.

Get interpreter warnings.

perl -e 'some perl'
perl file.pl

The -w option prints warnings.

What is a filehandle?

Which are built in?

A data type that can represent files, devices, sockets, and pipes.

STDOUT and STDERR are provided by default.

Get a filehandle.

Use open, whose simplest form is:

open(HANDLENAME, "filename");

What read/write options are available when requesting a new filehandle?

Readonly (default): "<filename"
Write (clobber): ">filename"
Write (append): ">>filename"

Read a line from a file.

Read a line from the terminal.

```
$str = <FILEHANDLE>
$str = <STDIN>
```

Write to a file.

Write to the terminal.

print FILEHANDLE 'str'

These two are the same:

print STDOUT 'str'
print 'str'

What's the difference between chop and chomp?

chop removes the last character of the string passed to it, and returns it.

chomp removes endl from the string passed to it, and returns the *number* of characters removed.

What is Perl's string concatenation operator?

Why does Perl have separate operators for string concatenation and arithmetic addition?

Use a period (.) for string concatenation.

sum.

Because of weak typing addition of scalars created as strings, but that can be interpreted as numbers, would result in a