

Computer Programming Quiz

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Session: Representing Floating Point Numbers

Practice Quiz



- Consider the C++ declaration

```
const float scaleFactor = -1.875 x 2-32;
```

Show how `scaleFactor` is represented in the computer's memory.

Recall float has 32 bits: 1 sign, 8 exponent, 23 mantissa and assume the number is represented as



Practice Quiz



- Now consider

```
const float accGravity = 9.875;
```

Show how `accGravity` is represented in the computer's memory.