1) What aspects of a Build Engineer role appeal to you?

2) List 3 important traits of a build system. (In this context, we're considering build system as anything between the user pushing code to source control and getting a finished software product.)  
  
  
3) Tell us about an improvement you've made to a build or test automation system/tool and how it helped your team. (If it's open-source, we'd love a link to the project!)  
  
  
4) In Git, what's the difference between a recursive merge and a fast forward merge? (bonus: what's an octopus merge?)

5) What is your favorite feature added to one of your favorite programming languages in the last few years and why?

6) Identify any problems with the functions below. How would you fix them? **Describe why** each issue is wrong.

#include "pch.h"

#include "iostream"

void main(void)

{

std::unique\_ptr<char\*> hello = std::make\_unique<char\*>(reinterpret\_cast<char\*>("world"));

char\*\* hello2 = hello.get();

std::unique\_ptr<char\*> world = std::move(hello);

std::cout << hello << std::endl;

std::cout << world;

delete \*hello;

std::cout << std::endl << \*hello2;

return 1;

}

std::list<int> IntRemover::RemoveLessThan5(const std::list<int> numbers!) const {

for (const auto& number : numbers!) {

if (number <= 5) {

numbers!.remove(number);

}

}

return numbers!;

}

7) Where did you resort to using a compiler on this test? What did you have to google? Share some links you found useful! Be honest :p