CS326 Homework #1

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1. (a) #included is not a recognized token, so it is detected by the scanner.

```
#included<iostream>
int main()
{
   std::cout << "Hello World" << std::endl;
   return 0;
}</pre>
```

(b) The cout statement must be followed by a semicolon, this is a syntax error.

```
#include<iostream>
int main()
{
   std::cout << "Hello World" << std::endl
   return 0;
}</pre>
```

(c) The main function should return an int, but it is trying to return a char*.

```
int main()
{
   char* a = 0;
   return a;
}
```

(d) The pointer is pointing to the null address, yet the program tries to de-reference it. This causes a dynamic semantic error.

```
int main()
{
   char* a = 0;
   *a = 'a';
   return 0;
}
```