```
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Test Cases
```

Good code:

```
{int a a=a string b a =b}$
{
        int a
       int b
       a = 0
        b = 0
       while (a != 3) {
       print(a)
       while (b != 3) {
               print(b)
               b = 1 + b
               if (b == 2) {
                       print("there is no spoon")
               }
       }
       b = 0
       a = 1 + a
       }
}$
{
int x
x = 4 + 4
if (x == 6 + 2) {
print(x)
}$
{
int a
 boolean b
 {
 string c
       {
```

```
a = 5
        b = false
        c = "inta"
  print(c)
 print(b)
print(a)
}$
string k
{
    k = "han"
 print(k)
}
}$
{
int a
boolean b
string c
a = 5
b = true
c = "inta"
print(c)
print(b)
print(c)
print(5+a)
}$
int a
string b
b = "bee"
{
 int b
 b = 1
```

```
a = b
 print(b)
 print(a)
print(b)
}$
{
int a
a = 0
string z
z = "bond"
while (a != 9) {
 if (a != 5) {
 print("bond")
 }
 {
 a = 1
 string b
 b = "james bond"
 print(b)
 }
}
{}
boolean c
c = true
boolean d
int b
b = 7
d = (true == (true == false))
d = (a == b)
d = (1 == a)
d = (1 != 1)
d = ("string" == z)
d = (z != "string")
d = ("string" != "string")
if (d == true) {
 int c
 c = 1 + b
 if (c == 1) {
 print("ugh")
}
```

```
while ("string" == z) {
 while (d == true) {
 a = 1 + b
}
}
}$
Bad code:
{
print("")
{}
int a
a = 0
int b
b = 8
 {
 {
       print("inta is not int a")
       print(1+2+3+4+5+4+3+2+1)
       print(a)
       c = "inta"
 }
 int a
  a = 7
 string b
 b = "one string"
 print(b)
 }
}$
'c' used without being declared
"not a statement"
209, 93, 193, 222
"two
lines"
}$
```

```
Undefined ','
{"not a statement"
}$
{
a = 0
}$
'a' is never declared
{
int a
a = "not an int"
}$
Cannot assign different type of value to already declared variable.
{
int a
int a
}$
Redeclared variable
int a
boolean a
}$
int a
string b
a = b
}$
Two different types
```

```
/*Variable re-declared on line 6. Results in error.*/
       string a
       a = "asdf"
       print (a)
       string a
       a = "test"
}$
{string 1}$
{a=12}$
~!@#%^&*_+{}|:<>?[];',./
bool ean d
}$
int a
a == 6
}$
{intfintif=2}$
int a
string b
b = a
}$
while "not a bool" {
 print("oh my")
print("done")
}$
```

```
{
 boolean b
 b = "false"
}$

{
 int a
 int b
 b = a
}$
```