

```

Type-
based
de-
clas-
si-
fi-
ca-
tion
type-
based
de-
clas-
si-
fi-
ca-
tion
pool
login(String
pass-
word,
String
guess)
re-
turn
pass-
word.eq(guess);
password
eq
login
guess
core
pool
login(String<Top
pass-
word,
String
guess)
re-
turn
pass-
word.eq(guess);
login
Top
TmH
type-
based
de-
clas-
si-
fi-
ca-
tion
pool
login(String
pass-
word,
String
guess)
re-
turn
pass-
word.hash().eq(guess);
password
password
hash
eq
eq
login
TmD
type-
based
de-
clas-
si-
fi-
ca-
tion

void
check(String<Bot
s);
    bool<Top
login(String<Top
pass-
word,
String
guess)
check(password);
re-
turn
pass-
word.eq(guess);
check
Top
<:
Bot

```