

Quiz15

Due Mar 25 at 12pm **Points** 10 **Questions** 7
Available Mar 20 at 12am - Mar 25 at 12pm **Time Limit** None

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	7 minutes	10 out of 10

❗ Correct answers will be available on Mar 25 at 2pm.

Score for this quiz: **10** out of 10
Submitted Mar 25 at 12:42am
This attempt took 7 minutes.

Question 1 1 / 1 pts

Hindley-Milner type inference algorithm is used in

- ☒ Haskell
- ☐ Java
- ☐ C
- ☐ C++

Question 2

1 / 1 pts

Hindley-Milner type inference algorithm receives as input ...

- ☐ the parse tree of the program
- ☒ the abstract syntax tree of the program
- ☐ the list of tokens
- ☐ the symbol table

Question 3

4 / 4 pts

Instantiation or unification in Hindley-Milner type inference algorithm?

Note: a,b,c are type variables below.

type variable (a) is replaced with (Int)

instantiation

type variable (a) is replaced with type variable (b)

unification

type variable (a) is replaced with polymorphic type (b -> c)

instantiation

type variable (a) is replaced with (b -> Int)

instantiation

Question 4

1 / 1 pts

In the definition below in Haskell, which kind of polymorphism is used?

```
f :: a -> a  
  
f x = x
```

- ☐ subtype
- ☒ parametric: explicit
- ☐ parametric: implicit
- ☐ ad-hoc

Question 5

1 / 1 pts

In the definition below in Java, which kind of polymorphism is used?

```
class Circle extends Shape {  
  
    ...  
  
}
```

☐ parametric: explicit

☐ parametric: implicit

☒ subtype

☐ ad-hoc

Question 6

1 / 1 pts

In the definition below in C, which kind of polymorphism is used?

```
int min (int x, int y) {  
    if (x < y) return x else return y;  
}  
  
float min (float x, float y) {  
    if (x < y) return x else return y;  
}
```

☐

parametric: explicit

☐

parametric: implicit

☐

subtype

☒

ad-hoc

Question 7

1 / 1 pts

In the definition below in Python, which kind of polymorphism is used?

```
def f (x):  
  
    return x
```

parametric: implicit

ad-hoc

subtype

parametric: explicit

Submission Details:

Time:	7 minutes
Current Score:	10 out of 10
Kept Score:	10 out of 10

Quiz Score: **10** out of 10

