

Quiz: Multiple Dispatch

1. Which of the following functions will throw an error when run on a square matrix?

A

```
function foo(x)  
    2.^rand(3)  
end
```

B

```
function foo(x)  
    return x^2  
end
```

C

```
function foo(x)  
    return 2*x  
end
```

D

```
function foo(x)  
    return .+(x, 2)  
end
```

2. Which of the following is the correct way to specify input argument types?

A

```
f(Int x) = x + 42
```

B

```
f(x as Int) = x + 42
```

C

```
f(x::Int) = x + 42
```

D

```
f(x: Int) = x + 42
```

3. What will be the output of the following code?

```
f(x::String) = x*"added text"  
f(x::Int) = x + 42  
f(x::Array) = 2 .* x  
f(x) = x^2
```

```
f("Is that an error? Looks like ")
```

- ☒ A "Is that an error? Looks like added text"
- ☐ B "Is that an error? Looks like 42"
- ☐ C "Is that an error? Looks likeIs that an error? Looks like "
- ☐ D Error

4. What will be the output of the following code?

```
f(x::int) = x*42  
f(x::string) = x*"extra text"  
f(x) = x*"abcd"
```

```
f("Looks like ")
```

- ☒ A "Looks like 42"
- ☐ B "Looks like extra text"
- ☐ C "Looks like abcd"
- ☐ D Error

5. Which of the following fills in the blanks correctly?

```
@which [1, 2, 3] + [2, 3, 4]
```

```
OUTPUT: +(A::____, Bs::____...) in Base at arraymath.jl:44
```

☒ A Array, Array

☐ B Int, Int

☐ C Array, Int

☐ D None of the above

6. What is this method to specify input parameters called?

```
f(x::Int) = x^2
```

☐ A Array comprehension

☐ B Anonymous function

☒ C Multiple Dispatch

☐ D Multiple Encapsulated Metadata Entry Socket (MEMES)

7. What does the following code print?

```
foo(x::String) = x * "I don't trust like that"  
methods(foo)
```

☒ A Information about the parameters the function accepts

☐ B Different methods to implement the same function

☐ C All the LLVM code the function executes

☐ D "I don't trust like that"