

# **Erlang and message passing**

---

What does process Q print?

---

process P

```
p() -> % Q is Q's pid
Q ! {self(), 0},
Q ! {self(), 2}.
```

process Q

```
q() -> % P is P's pid
receive {P, N} ->
  io:format("~p", [N+1]) end,
q().
```

1. 0 and 2, in any order
2. 0 and then 2
3. 1 and then 3
4. 1 and 3, in any order

What does process Q print?

---

process P

```
p() -> % Q is Q's pid
Q ! {self(), 0},
Q ! {self(), 2}.
```

process Q

```
q() -> % P is P's pid
receive {P, N} ->
  io:format("~p", [N+1]) end,
q().
```

1. 0 and 2, in any order
2. 0 and then 2
3. 1 and then 3
4. 1 and 3, in any order

What do processes P and Q print?

---

process P

```
p() -> % Q is Q's pid
Q ! {Q, 0},
receive {P, N} ->
    io:format("~p", [N+1])
end.
```

process Q

```
q() -> % P is P's pid
P ! {P, 2},
receive {Q, N} ->
    io:format("~p", [N+1])
end.
```

1. 0 and 2, in any order
2. 0 and then 2
3. 1 and then 3
4. 1 and 3, in any order

What do processes P and Q print?

---

process P

```
p() -> % Q is Q's pid
Q ! {Q, 0},
receive {P, N} ->
    io:format("~p", [N+1])
end.
```

process Q

```
q() -> % P is P's pid
P ! {P, 2},
receive {Q, N} ->
    io:format("~p", [N+1])
end.
```

1. 0 and 2, in any order
2. 0 and then 2
3. 1 and then 3
4. **1 and 3, in any order**

What does process Q print?

---

```
process P
p() -> % Q is Q's pid
self() ! self(),
receive self() ->
  Q !
  {self(),
   fun (Y) -> Y+1 end}
end.
```

```
process Q
q() -> % P is P's pid
receive {P, F} ->
  io:format("~p", [F(3)]) end.
```

1. 3
2. 4
3. P's pid (process identifier)
4. Q's pid (process identifier)

What does process Q print?

---

```
process P
p() -> % Q is Q's pid
self() ! self(),
receive self() ->
  Q !
  {self(),
   fun (Y) -> Y+1 end}
end.
```

```
process Q
q() -> % P is P's pid
receive {P, F} ->
  io:format("~p", [F(3)]) end.
```

1. 3
2. 4
3. P's pid (process identifier)
4. Q's pid (process identifier)