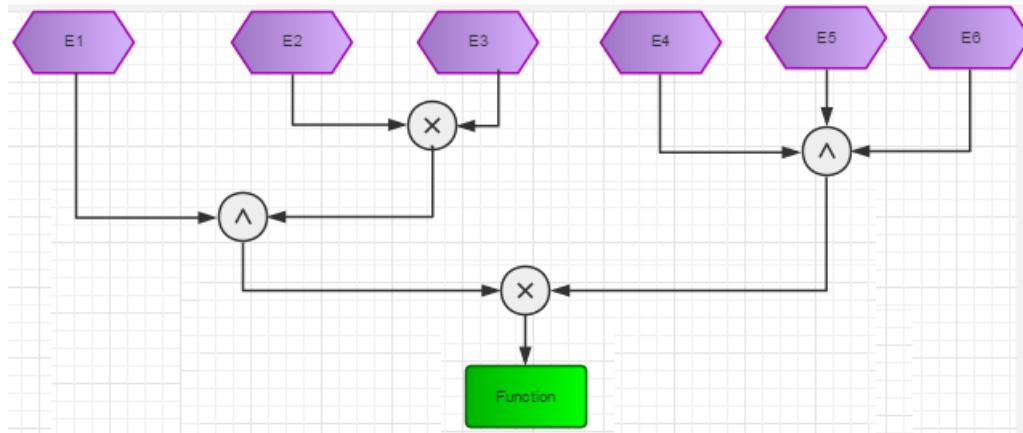


## Assignment 6 Model Answer



**Every step 1 mark, with total 12 marks for each method. Total grade: 24**

**Method (1): Subscribe in All, event instance, unsubscribe upon consumption**

1. **At t1: e6 (1000)** → Factory creates p1000 of (e6 (1000)), p1000 subscribes in (e1, e2, e3, e4, e5).
2. **At t2: e1 (1001)** → Factory creates p1001 of (e1 (1001)), p1001 subscribes in (e2, e3, e4, e5, e6).
3. **At t3: e5 (1000)** → Factory ignores creation of p1000, p1000 consumes e5, p1000 unsubscribes from e5 (still subscribing for (e1, e2, e3, e4)).
4. **At t4: e4 (1001)** → Factory ignores creation of p1001, p1001 consumes e4, p1001 unsubscribes from e4 (still subscribing for (e2, e3, e5, e6)).
5. **At t5: e3 (1001)** → Factory ignores creation of p1001, p1001 consumes e3, p1001 unsubscribes from e3, business process is **activated** [process instance **p1001**]. (still subscribing for (e2, e5, e6)).
6. **At t6: e1 (1000)** → Factory ignores creation of p1000, p1000 consumes e1, p1000 unsubscribes from e1 (still subscribing for (e2, e3, e4)).
7. **At t7: e6 (1001)** → Factory ignores creation of p1001, p1001 consumes/ignores e6, p1001 unsubscribes from e6 (still subscribing for (e2, e5)).
8. **At t8: e3 (1000)** → Factory ignores creation of p1000, p1000 consumes e3, p1000 unsubscribes from e3, business process is **activated** [process instance **p1000**]. (still subscribing for (e2, e4)).
9. **At t9: e2 (1001)** → Factory ignores creation of p1001, p1001 consumes/ignores e2, p1001 unsubscribes from e2 (still subscribing for (e5)).
10. **At t10: e5 (1001)** → Factory ignores creation of p1001, p1001 consumes/ignores e5, p1001 unsubscribes from e5.
11. **At t11: e4 (1000)** → Factory ignores creation of p1000, p1000 consumes/ignores e4, p1000 unsubscribes from e4 (still subscribing for (e2)).
12. **At t12: e2 (1000)** → Factory ignores creation of p1000, p1000 consumes/ignores e2.

**Method (2): Subscribe in Missing, event type, unsubscribe upon consumption & activation**

1. **At t1: e6 (1000) →** Factory creates p1000 of (e6 (1000)), p1000 subscribes in (e4, e5).
2. **At t2: e1 (1001) →** Factory creates p1001 of (e1 (1001)), p1001 subscribes in (e2, e3).
3. **At t3: e5 (1000) →** Factory ignores creation of p1000, p1000 consumes e5, p1000 unsubscribes from e5 (still subscribing for (e4)).
4. **At t4: e4 (1001) →** Factory ignores creation of p1001 (still subscribing for (e2, e3). **p1000 ignores e4(1001)**).
5. **At t5: e3 (1001) →** Factory ignores creation of p1001, p1001 consumes e3, p1001 unsubscribes from e2, e3, business process is **activated** [process instance **p1001**].
6. **At t6: e1 (1000) →** Factory ignores creation of p1000 (still subscribing for e4).
7. **At t7: e6 (1001) →** Factory ignores creation of p1001.
8. **At t8: e3 (1000) →** Factory ignores creation of p1000.
9. **At t9: e2 (1001) →** Factory ignores creation of p1001.
10. **At t10: e5 (1001) →** Factory ignores creation of p1001.
11. **At t11: e4 (1000) →** Factory ignores creation of p1000, p1000 consumes e4, p1000 unsubscribes from e4, business process is **activated** [process instance **p1000**].
12. **At t12: e2 (1000) →** Factory ignores creation of p1000.