No pipelining

1:
$$x++;$$
 p.a = x + p.b;

2:
$$x++;$$
 p.a = x + p.b;

Packets

3:
$$x++;$$
 $p.a = x + p.b;$

4:
$$x++;$$
 $p.a = x + p.b;$

Transactional programmer view

Packets

Two Stage Pipeline

3:
$$x^{++};$$
 p.a = p.tmp + p.b; p.tmp = x;

$$x^{++};$$

p.tmp = x;
 $y^{++};$
 y^{+}
 y^{-}
 y^{-}
 y^{-}
 y^{-}
 y^{-}
 y^{-}
 y^{-}
 y^{-}

Banzai implementation