Algorithm 2: Connection event incorporation

Input: Should-be-included and executable events of the base test case E_{exe}, a should-be-included but not executable event of the base test case e_i, target app app_t, time limit max_time

Output: New test case T_{new}

```
1  T_new ← E_exe;
2  E_pre ← [];
3  driver ← Launch(app_t);
4  driver.ExecuteEvents(E_exe);
5  while the time duration does not exceed max_time do
6      E ← GenerateEvents(driver.GetWidgets());
7      for each e_s in E do
8          driver.Execute(e_s);
9          executeSuccess ← driver.Execute(e_i);
10         if executeSuccess = True then
11             T_new.Append([E_pre, e_s, e_i]);
12             return T_new;
13         end
14         driver.BacktrackToLastState();
15     end
16     e_rand ← Random(E);
17     E_pre.Append(e_rand);
18     driver.Execute(e_rand);
19 end
20 return T_new;
```