Routing - small network simulator

Small simulator that uses RIP protocol to share network map between routers.

To use simulator you have to create routers and links between them. You also have to specify routing algorithm (for short path algorithm you also have to specify vector class) I have writen vector classes and short path algorithm. Everything else was provided by lecturer

Examples

```
ShortPathRouter.set_vector(GraphVector)
#set vector class

sim = Simulator()
algo = ShortPathRouter
v = sim.add_router(algo, 'a')
u = sim.add_router(algo, 'b')
sim.add_link(u, v)
#add router and link

for i in range(100):
    if i % 2 == 0:
        sim.add_packet(u, v)
    sim.route()
#simple simulation
#more examples in src folder
```