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1  """
2  COSC364 2022-S1 Assignment: RIP routing
3  Authors: MENG ZHANG (71682325), ZHENG CHAO (21671773)
4  File: rip_main.py
5  """
6
7
8  # Import Modules
9  import sys
10 import time
11 import threading
12 from rip_init import rip_router_init
13
14
15 # Program Entry Point
16 if __name__ == "__main__":
17     print("Starts RIP Daemon...")
18     # get config file name
19     try:
20         if len(sys.argv) != 2:
21             raise ValueError("Invalid argument for rip_main\n" +
22                               "Rip router requires ONE config file")
23         config_file_name = sys.argv[1]
24     except ValueError as error:
25         print(error)
26
27     # Initialise a new Router object
28     ROUTER = rip_router_init(config_file_name)
29
30     # First advertise ROUTER itself immediately
31     ROUTER.advertise_routes('all')
32     ROUTER.print_routing_table()
33     ROUTER.random_offset_period()
34
35     # Start loop
36     while True:
37         ROUTER.receive_routes()
38         ROUTER.advertise_all_routes_periodically()
39         ROUTER.check_timeout_entries_periodically()
```