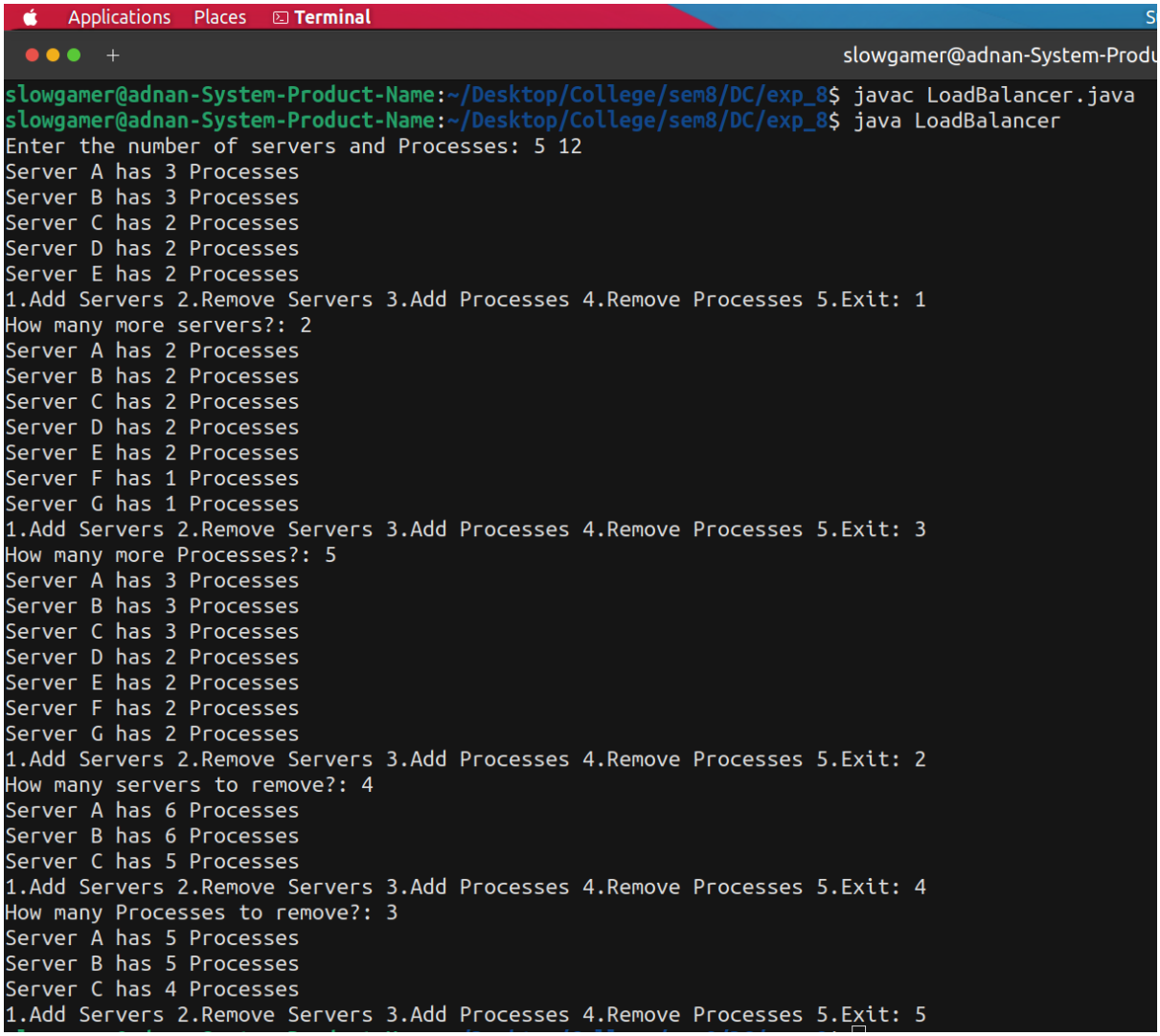
Code

LoadBalancer.java

```
import java.util.Scanner;
class LoadBalancer {
   static void printLoad(int servers, int Processes) {
      int each = Processes / servers;
      int extra = Processes % servers;
      int total = 0;
      for (int i = 0; i < servers; i++) {
         if (extra-- > 0)
            total = each + 1;
         else
            total = each;
         System.out.println("Server " + (char) ('A' + i) + " has " + total + " Processes");
      }
   }
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      System.out.print("Enter the number of servers and Processes: ");
      int servers = sc.nextInt();
      int Processes = sc.nextInt();
      while (true) {
         printLoad(servers, Processes);
         System.out.print("1.Add Servers 2.Remove Servers 3.Add Processes 4.Remove
Processes 5.Exit: ");
         switch (sc.nextInt()) {
            case 1:
               System.out.print("How many more servers?: ");
               servers += sc.nextInt();
               break;
            case 2:
               System.out.print("How many servers to remove?: ");
               servers -= sc.nextInt();
               break;
            case 3:
               System.out.print("How many more Processes?: ");
               Processes += sc.nextInt();
               break;
            case 4:
               System.out.print("How many Processes to remove?: ");
               Processes -= sc.nextInt();
               break;
            case 5:
               return;
         }
      }
   }
}
```

Output


Applications Places Terminal
slowgamer@adnan-System-Produ
slowgamer@adnan-System-Product-Name:~/Desktop/College/sem8/DC/exp_8$ javac LoadBalancer.java
slowgamer@adnan-System-Product-Name:~/Desktop/College/sem8/DC/exp_8$ java LoadBalancer
Enter the number of servers and Processes: 5 12
Server A has 3 Processes
Server B has 3 Processes
Server C has 2 Processes
Server D has 2 Processes
Server E has 2 Processes
1.Add Servers 2.Remove Servers 3.Add Processes 4.Remove Processes 5.Exit: 1
How many more servers?: 2
Server A has 2 Processes
Server B has 2 Processes
Server C has 2 Processes
Server D has 2 Processes
Server E has 2 Processes
Server F has 1 Processes
Server G has 1 Processes
1.Add Servers 2.Remove Servers 3.Add Processes 4.Remove Processes 5.Exit: 3
How many more Processes?: 5
Server A has 3 Processes
Server B has 3 Processes
Server C has 3 Processes
Server D has 2 Processes
Server E has 2 Processes
Server F has 2 Processes
Server G has 2 Processes
1.Add Servers 2.Remove Servers 3.Add Processes 4.Remove Processes 5.Exit: 2
How many servers to remove?: 4
Server A has 6 Processes
Server B has 6 Processes
Server C has 5 Processes
1.Add Servers 2.Remove Servers 3.Add Processes 4.Remove Processes 5.Exit: 4
How many Processes to remove?: 3
Server A has 5 Processes
Server B has 5 Processes
Server C has 4 Processes
1.Add Servers 2.Remove Servers 3.Add Processes 4.Remove Processes 5.Exit: 5