DC Expt-8

Program:

import java.util.Scanner;

class LoadBalancer {

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  // 211P030

  static void printLoad(int servers, int Processes) {

    int each = Processes / servers;

    int extra = Processes % servers;

    int total;

    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 & processes respectively: ");

    int servers = sc.nextInt();

    int Processes = sc.nextInt();

    while (true) {

      printLoad(servers, Processes);

      System.out.print("\n1.Add Servers 2.Remove Servers 3.Add Processes 4.Remove Processes 5.Exit\nEnter(1-5): ");

      switch (sc.nextInt()) {

        case 1 -> {

          System.out.print("How many more servers?: ");

          servers += sc.nextInt();

        }

        case 2 -> {

          System.out.print("How many servers to remove?: ");

          servers -= sc.nextInt();

        }

        case 3 -> {

          System.out.print("How many more Processes?: ");

          Processes += sc.nextInt();

        }

        case 4 -> {

          System.out.print("How many Processes to remove?: ");

          Processes -= sc.nextInt();

        }

        case 5 -> {

          return;

        }

      }

    }

  }

}



