MINI PROJECT

PROBLEM STATEMENT:

C program that calculates and keeps track of all the products purchased from a restaurant weekly. It should be able to tell-

How many customers visited in a week
How many customers visited per day
Mean of no. of customers that visited
Total revenue generated in a week
Total revenue generated per day
Mean of total revenue generated per day
On which day the most revenue was generated

Given that the menu is as follows, ['Dish' (price)]

1- Crispy Calamari Rings (400)
2- Prawn Pie (700)
3- Sticky Toffee Pudding (600)
4- Yorkshire Lamb Patties (900)
5- Roast Lamb Salad (800)
6- Stuffed Jacket Potatoes (300)
7- Paneer Steak (500)

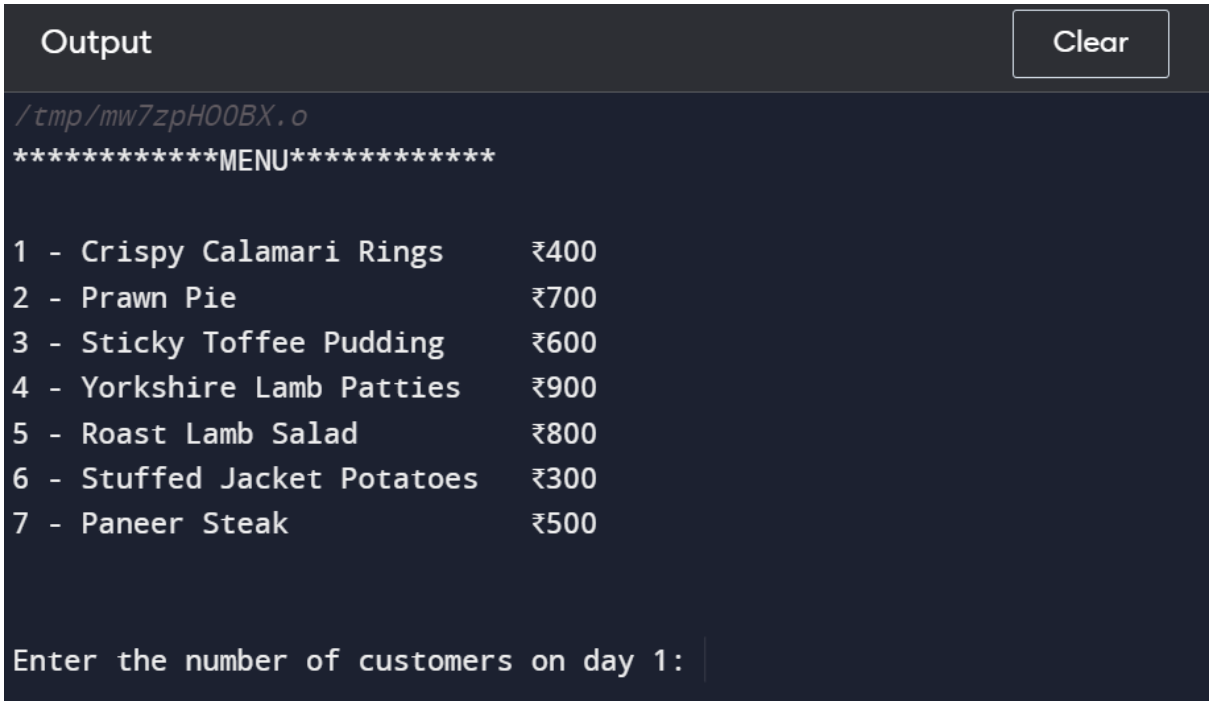
CODE:

```
#include <stdio.h>

int main () {
   int menu_prices[] = {400, 700, 600, 900, 800, 300, 500};
   int num_customers[7] = {0};
   int revenue [7] = {0};
   int total_customers = 0;
   int total_revenue = 0;
   int max_revenue_day = 0;

        printf("**********MENU**********\n\n");
        printf("1 - Crispy Calamari Rings        ₹400\n");
        printf("2 - Prawn Pie                    ₹700\n");
        printf("3 - Sticky Toffee Pudding        ₹600\n");
        printf("4 - Yorkshire Lamb Patties       ₹900\n");
        printf("5 - Roast Lamb Salad             ₹800\n");
        printf("6 - Stuffed Jacket Potatoes      ₹300\n");
        printf("7 - Paneer Steak                 ₹500\n");
        printf("\n");

   for (int day = 1; day <= 7; day++) {
      printf("\nEnter the number of customers on day %d: ", day);
      scanf("%d", &num_customers[day-1]);

      for (int i = 0; i < num_customers[day-1]; i++) {
         printf("\nEnter the dish ordered by customer %d (1-7):", i+1);
         int dish;
         scanf("%d", &dish);
         revenue[day-1] += menu_prices[dish-1];
      }
      total_customers += num_customers[day-1];
      total_revenue += revenue[day-1];
      if (revenue[day-1] > revenue[max_revenue_day]) {
         max_revenue_day = day-1;
```

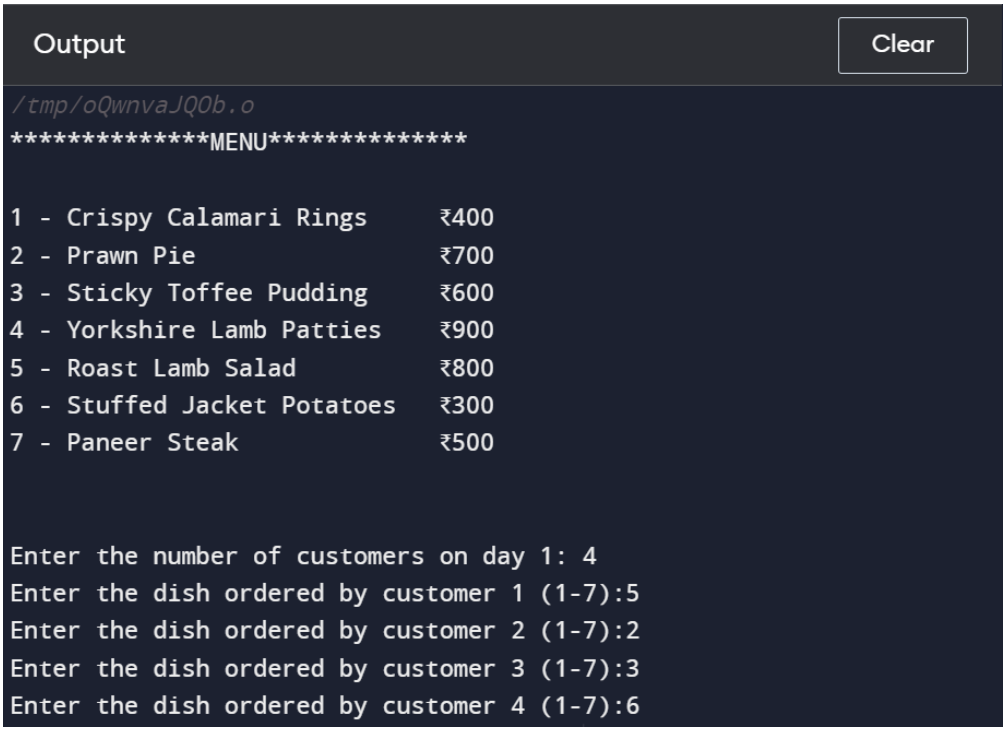
```
    }
  }
  printf("\nStatics:\n");
  printf("Total number of customers in the week:  %d\n\n", total_customers);
  printf("Average number of customers per day:    %.2f\n\n", (float)
total_customers / 7);
  printf("Total revenue generated in the week:     %d\n\n", total_revenue);
  printf("Average revenue generated per day:      %.2f\n\n", (float)
total_revenue / 7);
  printf("Day with the most revenue:                Day %d\n\n",
max_revenue_day+1);

  return 0;
}
```

OUTPUT:

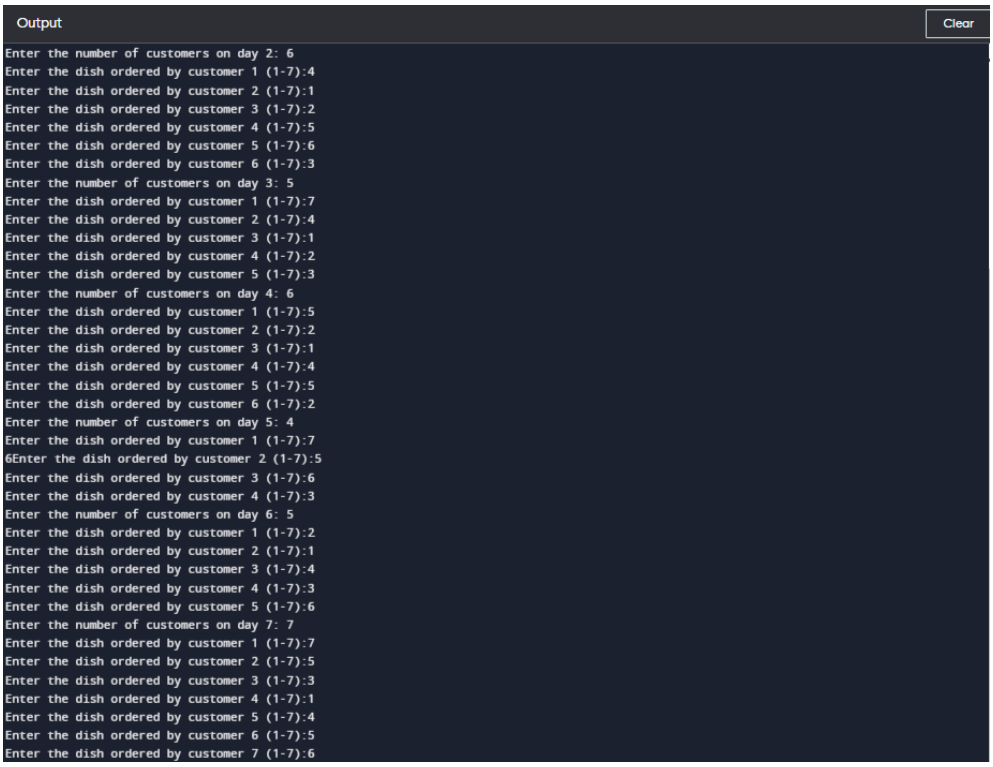
1. The menu appears along the price and corresponding digit for reference as program initiates.



2. Then the program askes to input total customers that visited on that day. Along with the dishes ordered by each.



3. Same is repeated for all 7 days of the week.



4. Then the final statistics are given by the code.