JAVA MINI PROJECT

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Roll no: 126

Group Members:

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Guide: Mrs. Ashwini Mane

Subject: JAVA

Batch: JAVA2

Topic: Hotel Management

Concept included: Polymorphism, Inheritance, Abstraction and

Interface, Exception Handling

Code

```
1 package com.hotel.management;
  2⊕ import java.io.*; [
   4 interface Customer
   5 {
   6
         public void Information();
         public void payment();
  8 }
  10 interface Room service
  11 {
  12
         public void workload();
  13
        public void leave();
  14
        public void salary();
  15 }
  16
  17 interface Manager
  18 {
  19
         public void acc_handling();
  20 }
  22 interface Hotel_1 extends Customer,Room_service,Manager
  23 {

△ 24

         public void Information();
△ 25
        public void payment();
△ 26
        public void workload();
△ 27
       public void leave();
△ 28
        public void salary();
△ 29
        public void acc_handling();
 30 }
  31 abstract class Management implements Hotel_1
```

```
31 abstract class Management implements Hotel_1
  32 {
△ 33⊝
         public void Information()
  34
  35
             System.out.println("**CUSTOMER'S INFORMATION** ");
            System.out.println("Customer's information is successfully entered in record");
  36
             System.out.println("-----
  37
  38
  39
40⊖
         public void payment()
  41
  42
             System.out.println("**PAYMENT OPTIONS**");
            System.out.println("Customer can choose any payment options from below list: ");
  43
            System.out.println("1.ONLINE MODE ");
  44
  45
             System.out.println("2.CASH ");
  46
             System.out.println("3.DEBIT/CREDIT CARD ");
  47
             System.out.println("--
  48
  49
△ 50Θ
         public void workload()
  5.1
  52
             System.out.println("**WORKLOAD OF HOTEL EMPLOYEES**");
  53
            System.out.println("Room service is available 24/7 ");
             System.out.println("Helper works 9 hours per day ");
  54
  55
             System.out.println("Hotel staff works 11 hours per day ");
  56
             System.out.println("----
  57
△ 58⊖
         public void leave()
  59
  60
             System.out.println("Hotel employees take leave for: ");
```

```
61
          System.out.println("1. EMERGENCY LEAVE ");
 62
           System.out.println("2. SICK LEAVE ");
 63
           System.out.println("3. EARNED LEAVE ");
  64
           System.out.println("-----
  65
△ 66⊖
      public void salary()
 67
           System.out.println("**SALARY**");
  69
           System.out.println("1.Manager- Rs 35,000/month ");
           System.out.println("2.Hotel Staff- Rs 15,000/month ");
  70
           System.out.println("3.Chef- Rs 20,000/month ");
  71
           System.out.println("4.Helper- Rs 10,000/month ");
  72
  73
           System.out.println("-----
  74
△ 75Θ
       public void acc handling()
 76
 77
           System.out.println("Manager looks after account handling ");
  78
           System.out.println("Manager takes care of inconvience issue raised by customer");
 79
           System.out.println("Manager manages employees and for planning, coordinating hotel services");
  80
           System.out.println("----
 81
 82
 83 blic class Hotel extends Management{
 84
      String f name, 1 name;
 85
       int id;
 86
       String id num:
 87
      String email;
  88
       long mob no;
890 void accept()
```

```
890 void accept()
 90 {
<u>></u> 91
          Scanner s = new Scanner(System.in);
          System.out.print("\nEnter first name of the customer:");
  92
  93
          f name = s.next();
          System.out.print("\nEnter last name of the customer:");
          l_name = s.next();
  96
          System.out.print("\nEnter mobile number of the customer:");
  97
          mob_no = s.nextLong();
  98
          System.out.print("\nEnter email id of the customer:");
 99
          email = s.next();
          System.out.println("Select type of id proof:\nl)Aadhar card\n2)Passport\n3)Driving License\n4)Pan card"
          System.out.print("\nEnter choice:");
 102
          id = s.nextInt();
103
          System.out.print("\nEnter the id number:");
 104
          id_num = s.next();
 105 }
 106⊖ void calculation(int days)
 107 {
 108
          int room_price = 3000;
109
          System.out.println("Selected room type is default");
110
          System.out.print("Bill generated for default days(one day):Rs."+room_price*days+"/-");
111 }
1120 void food()
113 {
<u>114</u>
          Scanner sc = new Scanner(System.in);
115
          System.out.println("Welcome to Rosewood Restaurant");
          System.out.println("1. Chicken Dishes");
          System.out.println("2. Vegetarian Dishes");
          System.out.println("3. Starters");
```

```
118
            System.out.println("3. Starters");
            System.out.println("4. Indian Bread");
119
            System.out.println("5.Chinese food");
120
121
            System.out.println("Enter your choice");
122
            int choice = sc.nextInt();
123
            switch (choice)
124
125
                 case 1:
                     ChickenDishes cd = new ChickenDishes();
126
127
                     cd.chickenDishes();
128
                     break;
129
                 case 2:
130
                     VegetarianDishes vd = new VegetarianDishes();
131
                     vd.vegetarianDishes():
132
                    break;
133
                 case 3:
134
                    Starters s = new Starters();
135
                     s.starters();
136
                    break;
137
                 case 4:
                    IndianBread ib = new IndianBread();
138
139
                     ib.indianBread();
140
                     break;
                 case 5:
141
142
                    Chinesefood cf = new Chinesefood();
                    cf.Chinese_food();
143
144
                    break;
145
                 default:
146
                    System.out.println("Invalid Choice");
147
```

```
148
149
150 }
151
152 class Luxury extends Hotel{
153⊖
        void calculation (int num rooms, int days)
154
             int room price = 7500;
155
             System.out.println("Selected room type is Luxury");
156
157
             System.out.print("Bill generated:Rs."+num_rooms*days*room_price+"/-");
158
        1
159 }
160 class Deluxe extends Hotel{
1619
        void calculation (int num rooms, int days)
162
         {
             int room_price = 6000;
163
             System.out.print("Selected room type is Deluxe");
System.out.print("Bill generated:Rs."+num_rooms*days*room_price+"/-");
164
165
166
        }
167 }
168 class Regular extends Hotel (
169⊖
        void calculation (int num rooms, int days)
170
         {
             int room_price = 6000;
171
             System.out.println("Selected room type is Regular");
172
173
             System.out.print("Bill generated:Rs."+num rooms*days*room price+"/-");
174
         }
175 }
176
177 class ChickenDishes
```

```
178 {
 179⊖
          void chickenDishes()
 180
              System.out.println("1. Chicken Tikka Masala");
 181
 182
              System.out.println("2. Chicken Korma");
 183
              System.out.println("3. Butter Chicken");
 184
              System.out.println("4. Chicken Biryani");
 185
              System.out.println("5. Chicken Jalfrezi");
 186
              System.out.println("Enter your choice");
№187
             Scanner sc = new Scanner(System.in);
int choice = sc.nextInt();
 188
              switch(choice)
 189
 190
              -{
 191
                  case 1:
 192
                       System.out.println("Chicken Tikka Masala");
                       System.out.println("Price: Rs. 300");
 193
                       break;
                  case 2:
 195
 196
                      System.out.println("Chicken Korma");
 197
                       System.out.println("Price: Rs. 250");
 198
                       break;
 199
                  case 3:
                      System.out.println("Butter Chicken");
                       System.out.println("Price: Rs. 350");
                      break:
 203
                  case 4:
 204
                     System.out.println("Chicken Biryani");
                       System.out.println("Price: Rs. 400");
 205
                      break;
 207
                  case 5:
                   case 5:
 208
                     System.out.println("Chicken Jalfrezi");
 209
                       System.out.println("Price: Rs. 300");
 210
                       break;
 211
                  default:
                       System.out.println("Invalid Choice");
 212
 213
              }
          1
 214
 215 }
 216
 217 class VegetarianDishes
 219⊖
          void vegetarianDishes()
 220
               System.out.println("1. Paneer Tikka Masala");
              System.out.println("2. Aloo Gobi");
System.out.println("3. Chana Masala");
 223
 224
              System.out.println("4. Dal Makhani");
 225
               System.out.println("5. Palak Paneer");
 226
               System.out.println("Enter your choice");
              Scanner sc = new Scanner(System.in);
int choice = sc.nextInt();
 227
 228
 229
               switch(choice)
 230
 231
                   case 1:
                       System.out.println("Paneer Tikka Masala");
 232
                       System.out.println("Price: Rs. 250");
 233
 234
                       break;
 235
                   case 2:
 236
                       System.out.println("Aloo Gobi");
```

```
237
                    System.out.println("Price: Rs. 200");
238
                    break;
239
                case 3:
240
                    System.out.println("Chana Masala");
241
                    System.out.println("Price: Rs. 200");
242
                    break;
243
                case 4:
                   System.out.println("Dal Makhani");
244
245
                    System.out.println("Price: Rs. 200");
246
                    break;
247
                case 5:
                   System.out.println("Palak Paneer");
248
                    System.out.println("Price: Rs. 250");
249
250
                    break;
251
                default:
                   System.out.println("Invalid Choice");
253
            }
254
255 }
256
257 class Starters
258 {
259⊖
        void starters()
260
261
            System.out.println("1. Onion Bhaji");
262
            System.out.println("2. Samosa");
263
            System.out.println("3. Pakora");
264
            System.out.println("4. Vegetable Cutlets");
            System.out.println("5. Paneer Tikka");
265
            System.out.println("Enter your choice");
266
1267
           Scanner sc = new Scanner(System.in);
268
             int choice = sc.nextInt();
269
             switch (choice)
270
             {
271
                 case 1:
                     System.out.println("Onion Bhaji");
272
273
                     System.out.println("Price: Rs. 100");
274
                     break;
275
                 case 2:
276
                     System.out.println("Samosa");
277
                     System.out.println("Price: Rs. 50");
278
                     break;
279
                 case 3:
280
                     System.out.println("Pakora");
281
                     System.out.println("Price: Rs. 50");
282
                     break:
283
                 case 4:
                     System.out.println("Vegetable Cutlets");
284
                     {\tt System.out.println("Price: Rs. 100");}\\
285
286
                     break:
287
                 case 5:
288
                     System.out.println("Paneer Tikka");
289
                     System.out.println("Price: Rs. 150");
290
291
                 default:
292
                     System.out.println("Invalid Choice");
293
294
         }
295 }
```

```
296
297 class IndianBread
298 {
         void indianBread()
 300
 301
              System.out.println("1. Naan");
              System.out.println("2. Roti");
 302
              System.out.println("3. Paratha");
 303
 304
              System.out.println("4. Kulcha");
 305
             System.out.println("5. Poori");
 306
             System.out.println("Enter your choice");
            Scanner sc = new Scanner (System.in);
int choice = sc.nextInt();
≥307
308
 309
             switch(choice)
 310
 311
                  case 1:
 312
                      System.out.println("Naan");
 313
                      System.out.println("Price: Rs. 50");
 314
                      break;
 315
                  case 2:
                     System.out.println("Roti");
 316
 317
                      System.out.println("Price: Rs. 20");
 318
                      break;
 319
                  case 3:
                      System.out.println("Paratha");
 320
 321
                      System.out.println("Price: Rs. 30");
                      break;
 323
                  case 4:
                      System.out.println("Kulcha");
 324
                      System.out.println("Price: Rs. 40");
 325
326
                       break;
327
                   case 5:
 328
                       System.out.println("Poori");
                       System.out.println("Price: Rs. 30");
 329
 331
                   default:
 332
                       System.out.println("Invalid Choice");
 333
              1
 334
         }
 335 }
 337 class Chinesefood
 338 {
 339⊖
          void Chinese_food()
 340
               System.out.println("1.Manchow soup ");
 341
               System.out.println("2.Chicken Fried Rice");
 343
               System.out.println("3.Fried Rice");
              System.out.println("4.Hakka Noodles");
System.out.println("5.Manchurian");
 344
 345
              System.out.println("Enter your choice");
 346
              Scanner sc = new Scanner(System.in);
int choice = sc.nextInt();
≥347
 348
 349
               switch (choice)
 350
 351
                   case 1:
                       System.out.println("Manchow soup");
 352
                       System.out.println("Price: Rs. 100");
 355
                   case 2:
```

```
System.out.println("Chicken Fried Rice");
 356
                          System.out.println("Price: Rs. 250");
 357
                         break;
 359
                     case 3:
 360
                         System.out.println("Fried Rice");
                          System.out.println("Price: Rs. 300");
 361
 362
                         break;
 363
                     case 4:
 364
                          System.out.println("Hakka Noodles");
 365
                          System.out.println("Price: Rs. 200");
 366
                         break;
 367
                    case 5:
                         System.out.println("Manchurian");
 368
 369
                          System.out.println("Price: Rs. 200");
 370
                          break;
 371
                     default:
                         System.out.println("Invalid Choice");
 372
 373
               }
 375 }
 376
377 class Execution extends Exception(
 378
           private static final Exception NullPointerException = null;
           public static void ValidNumRooms(int num_rooms) throws Exception{//custom exception handling
 380
               if(num_rooms>=1)
 381
                     System.out.println("Entered number of rooms is valid");
 382
 383
               else
                  throw NullPointerException:
386
 387
             }
 388
 389⊖
         public static void main(String[] args) throws Exception
 390
             Scanner s = new Scanner(System.in);
Hotel h = new Hotel();
3391
392
 393
              Luxury 1 = new Luxury();
Deluxe d = new Deluxe();
 394
 395
              Regular r = new Regular();
int ch = 0;
 396
 397
398
              int days = 0;
              int num_rooms = 0;
             399
400
 401
402
 403
404
 405
 406
 407
                  //choices
 408
                  System.out.print("\nCHOOSE AN OPTION TO PROCEED FURTHER\n___Bill generation___");
                  System.out.print("\n1)For default suite\n2)For regular suite\n3)For Deluxe suite");
System.out.print("\n4)For Luxury Suite\n5)Order Food\n6)Payment Process\n7)Workload");
System.out.println("\n8)Leave availables for employees\n9)Displaying Salary\n10)EXIT");
 409
 410
 411
 412
                  System.out.print("\nEnter your choice:");
 413
                  ch = s.nextInt();
                  switch(ch)
 415
```

```
416
                 case 1:
                     h.accept();
                     System.out.print("\nEnter number of days you prefer to stay:");
days = s.nextInt();
418
419
420
                     h.calculation(days);
421
                 break;
423
                 case 2:
424
                    r.accept();
425
                     426
                     num rooms = s.nextInt();
                     Nam_looms - s.neathe(),
ValidNumRooms(num_rooms);
System.out.print("\nEnter number of days you prefer to stay:");
428
429
                     days = s.nextInt();
430
                     r.calculation(num_rooms,days);
431
               break:
432
433
                 case 3:
434
                    d.accept();
                     System.out.print("\nEnter number of rooms you want to book:");
                     num_rooms = s.nextInt();
ValidNumRooms(num_rooms);
436
437
438
                     System.out.print("\nEnter number of days you prefer to stay:");
                    days = s.nextInt();
439
                     d.calculation(num_rooms, days);
441
                 break;
442
443
444
                     1.accept():
                     System.out.print("\nEnter number of rooms you want to book:");
446
                     num_rooms = s.nextInt();
                     ValidNumRooms(num rooms);
System.out.print("\nEnter number of days you prefer to stay:");
447
449
                     days = s.nextInt();
                     1.calculation(num_rooms, days);
451
452
454
                     h.food();
455
                 break;
456
457
                 case 6:
                  h.Information();
h.payment();
459
460
                 break;
461
                 case 7:
462
                     h.workload();
464
                 break;
465
467
                     h.leave();
469
470
                 case 9:
                     System.out.println("\nJob done by Manager");
472
                     h.acc_handling();
                 break;
```

```
465
 466
             case 8:
 467
                h.leave():
 468
             break;
 469
 470
             case 9:
 471
                h.salary();
                System.out.println("\nJob done by Manager");
 472
 473
                h.acc_handling();
 474
             break;
 475
 476
 477
     }while(ch!=10);
 478 System.out.println("Do visit us again!\nTHANK YOU!");
 479 1
 480 }
481
package com.hotel.management;
import java.io.*;
import java.util.*;
interface Customer
      public void Information();
      public void payment();
}
interface Room service
      public void workload();
      public void leave();
      public void salary();
}
interface Manager
      public void acc_handling();
interface Hotel 1 extends Customer,Room service,Manager
      public void Information();
      public void payment();
      public void workload();
      public void leave();
      public void salary();
      public void acc handling();
abstract class Management implements Hotel 1
      public void Information()
             System.out.println("**CUSTOMER'S INFORMATION** ");
             System.out.println("Customer's information is successfully
entered in record");
             System.out.println("-----
----");
      public void payment()
             System.out.println("**PAYMENT OPTIONS**");
             {\tt System.} \textit{out.} {\tt println("Customer can choose any payment options}
from below list: ");
```

```
System.out.println("1.ONLINE MODE ");
           System.out.println("2.CASH ");
           System.out.println("3.DEBIT/CREDIT CARD ");
           System.out.println("-----
----");
     public void workload()
           System.out.println("**WORKLOAD OF HOTEL EMPLOYEES**");
           System.out.println("Room service is available 24/7 ");
           System.out.println("Helper works 9 hours per day ");
           System.out.println("Hotel staff works 11 hours per day ");
           System.out.println("-----
----");
     public void leave()
           System.out.println("Hotel employees take leave for: ");
           System.out.println("1. EMERGENCY LEAVE ");
           System.out.println("2. SICK LEAVE ");
           System.out.println("3. EARNED LEAVE ");
           System.out.println("-----
----");
     public void salary()
           System.out.println("**SALARY**");
           System.out.println("1.Manager- Rs 35,000/month ");
           System.out.println("2.Hotel Staff- Rs 15,000/month ");
           System.out.println("3.Chef- Rs 20,000/month ");
           System.out.println("4.Helper- Rs 10,000/month ");
           System.out.println("-----
----");
     public void acc handling()
           System.out.println("Manager looks after account handling ");
           System.out.println("Manager takes care of inconvience issue
raised by customer");
           System.out.println("Manager manages employees and for planning,
coordinating hotel services");
           System.out.println("-----
----");
public class Hotel extends Management{
     String f name, 1 name;
     int id;
     String id num;
     String email;
     long mob no;
     void accept()
           Scanner s = new Scanner(System.in);
           System.out.print("\nEnter first name of the customer:");
           f name = s.next();
           System.out.print("\nEnter last name of the customer:");
           l name = s.next();
           System.out.print("\nEnter mobile number of the customer:");
           mob no = s.nextLong();
```

```
System.out.print("\nEnter email id of the customer:");
            email = s.next();
            System.out.println("Select type of id proof:\n1)Aadhar
card\n2)Passport\n3)Driving License\n4)Pan card");
            System.out.print("\nEnter choice:");
            id = s.nextInt();
            System.out.print("\nEnter the id number:");
            id num = s.next();
      void calculation(int days)
            int room price = 3000;
            System. out. println ("Selected room type is default");
            System.out.print("Bill generated for default days(one
day):Rs."+room price*days+"/-");
      void food()
            Scanner sc = new Scanner(System.in);
            System.out.println("Welcome to Rosewood Restaurant");
            System.out.println("1. Chicken Dishes");
            System.out.println("2. Vegetarian Dishes");
            System.out.println("3. Starters");
            System.out.println("4. Indian Bread");
            System.out.println("5.Chinese food");
            System.out.println("Enter your choice");
            int choice = sc.nextInt();
            switch(choice)
                  case 1:
                        ChickenDishes cd = new ChickenDishes();
                        cd.chickenDishes();
                        break;
                  case 2:
                        VegetarianDishes vd = new VegetarianDishes();
                        vd.vegetarianDishes();
                  case 3:
                        Starters s = new Starters();
                        s.starters();
                  case 4:
                        IndianBread ib = new IndianBread();
                        ib.indianBread();
                  case 5:
                      Chinesefood cf = new Chinesefood();
                        cf.Chinese food();
                        break;
                  default:
                        System.out.println("Invalid Choice");
            }
class Luxury extends Hotel{
      void calculation(int num rooms,int days)
            int room price = 7500;
            System.out.println("Selected room type is Luxury");
```

```
System.out.print("Bill
generated:Rs."+num rooms*days*room price+"/-");
class Deluxe extends Hotel{
      void calculation(int num rooms,int days)
            int room price = 6000;
            System.out.print("Selected room type is Deluxe");
            System.out.print("Bill
generated:Rs."+num rooms*days*room price+"/-");
class Regular extends Hotel{
      void calculation(int num rooms,int days)
            int room price = 6000;
            System.out.println("Selected room type is Regular");
            System.out.print("Bill
generated:Rs."+num rooms*days*room price+"/-");
}
class ChickenDishes
      void chickenDishes()
            System.out.println("1. Chicken Tikka Masala");
            System.out.println("2. Chicken Korma");
            System.out.println("3. Butter Chicken");
            System.out.println("4. Chicken Biryani");
            System.out.println("5. Chicken Jalfrezi");
            System.out.println("Enter your choice");
            Scanner sc = new Scanner(System.in);
            int choice = sc.nextInt();
            switch (choice)
                        System.out.println("Chicken Tikka Masala");
                        System.out.println("Price: Rs. 300");
                  case 2:
                        System.out.println("Chicken Korma");
                        System.out.println("Price: Rs. 250");
                  case 3:
                        System.out.println("Butter Chicken");
                        System.out.println("Price: Rs. 350");
                        break:
                  case 4:
                        System.out.println("Chicken Biryani");
                        System.out.println("Price: Rs. 400");
                        break;
                  case 5:
                        System.out.println("Chicken Jalfrezi");
                        System.out.println("Price: Rs. 300");
                        break;
                  default:
                        System.out.println("Invalid Choice");
            }
```

```
}
class VegetarianDishes
      void vegetarianDishes()
            System.out.println("1. Paneer Tikka Masala");
            System.out.println("2. Aloo Gobi");
            System.out.println("3. Chana Masala");
            System.out.println("4. Dal Makhani");
            System.out.println("5. Palak Paneer");
            System.out.println("Enter your choice");
            Scanner sc = new Scanner(System.in);
            int choice = sc.nextInt();
            switch (choice)
                  case 1:
                        System.out.println("Paneer Tikka Masala");
                        System.out.println("Price: Rs. 250");
                        break;
                  case 2:
                        System.out.println("Aloo Gobi");
                        System.out.println("Price: Rs. 200");
                        break;
                  case 3:
                        System.out.println("Chana Masala");
                        System.out.println("Price: Rs. 200");
                        break;
                  case 4:
                        System.out.println("Dal Makhani");
                        System.out.println("Price: Rs. 200");
                        break;
                  case 5:
                        System.out.println("Palak Paneer");
                        System.out.println("Price: Rs. 250");
                        break;
                  default:
                        System.out.println("Invalid Choice");
            }
      }
class Starters
      void starters()
            System.out.println("1. Onion Bhaji");
            System.out.println("2. Samosa");
            System.out.println("3. Pakora");
            System.out.println("4. Vegetable Cutlets");
            System.out.println("5. Paneer Tikka");
            System.out.println("Enter your choice");
            Scanner sc = new Scanner(System.in);
            int choice = sc.nextInt();
            switch (choice)
                  case 1:
                        System.out.println("Onion Bhaji");
                        System.out.println("Price: Rs. 100");
                        break;
                  case 2:
```

```
System.out.println("Samosa");
                         System.out.println("Price: Rs. 50");
                        break;
                  case 3:
                         System.out.println("Pakora");
                        System.out.println("Price: Rs. 50");
                        break;
                  case 4:
                         System.out.println("Vegetable Cutlets");
                         System.out.println("Price: Rs. 100");
                        break;
                  case 5:
                         System.out.println("Paneer Tikka");
                         System.out.println("Price: Rs. 150");
                        break;
                  default:
                        System.out.println("Invalid Choice");
            }
      }
}
class IndianBread
      void indianBread()
            System.out.println("1. Naan");
            System.out.println("2. Roti");
            System.out.println("3. Paratha");
            System.out.println("4. Kulcha");
            System.out.println("5. Poori");
            System.out.println("Enter your choice");
            Scanner sc = new Scanner(System.in);
            int choice = sc.nextInt();
            switch (choice)
                  case 1:
                         System.out.println("Naan");
                         System.out.println("Price: Rs. 50");
                  case 2:
                         System.out.println("Roti");
                         System.out.println("Price: Rs. 20");
                        break;
                  case 3:
                         System.out.println("Paratha");
                         System.out.println("Price: Rs. 30");
                        break;
                  case 4:
                         System.out.println("Kulcha");
                         System.out.println("Price: Rs. 40");
                        break;
                  case 5:
                         System.out.println("Poori");
                         System.out.println("Price: Rs. 30");
                        break;
                  default:
                         System.out.println("Invalid Choice");
            }
}
```

```
class Chinesefood
      void Chinese food()
            System.out.println("1.Manchow soup ");
            System.out.println("2.Chicken Fried Rice");
            System.out.println("3.Fried Rice");
            System.out.println("4.Hakka Noodles");
            System.out.println("5.Manchurian");
            System.out.println("Enter your choice");
            Scanner sc = new Scanner(System.in);
            int choice = sc.nextInt();
            switch (choice)
                  case 1:
                        System.out.println("Manchow soup");
                        System.out.println("Price: Rs. 100");
                        break;
                  case 2:
                        System.out.println("Chicken Fried Rice");
                        System.out.println("Price: Rs. 250");
                        break:
                  case 3:
                        System.out.println("Fried Rice");
                        System.out.println("Price: Rs. 300");
                        break;
                  case 4:
                        System.out.println("Hakka Noodles");
                        System.out.println("Price: Rs. 200");
                        break;
                  case 5:
                        System.out.println("Manchurian");
                        System.out.println("Price: Rs. 200");
                        break;
                  default:
                        System.out.println("Invalid Choice");
            }
      }
class Execution extends Exception{
      private static final Exception NullPointerException = null;
      public static void ValidNumRooms(int num rooms) throws
Exception{//custom exception handling
            if(num rooms>=1)
                  System.out.println("Entered number of rooms is valid");
            else
                  throw NullPointerException;
      public static void main(String[] args) throws Exception
            Scanner s = new Scanner(System.in);
            Hotel h = new Hotel();
            Luxury 1 = new Luxury();
            Deluxe d = new Deluxe();
            Regular r = new Regular();
            int ch = 0;
```

```
int days = 0;
            int num rooms = 0;
            //Name of the Hotels and Resorts
            System.out.println("
           System.out.println("\nWELCOME TO ROSEWOOD HOTELS AND RESORTS");
            System.out.println(" Where cozy memory lasts
           do {
                  //choices
                  System.out.print("\nCHOOSE AN OPTION TO PROCEED
FURTHER\n Bill generation
                             ");
                  System.out.print("\n1)For default suite\n2)For regular
suite\n3)For Deluxe suite");
                  System.out.print("\n4)For Luxury Suite\n5)Order
Food\n6) Payment Process\n7) Workload");
                 System.out.println("\n8)Leave availables for
employees\n9)Displaying Salary\n10)EXIT");
                 System.out.print("\nEnter your choice:");
                  ch = s.nextInt();
                  switch (ch)
                  case 1:
                       h.accept();
                        System.out.print("\nEnter number of days you prefer
to stay:");
                        days = s.nextInt();
                        h.calculation(days);
                 break:
                  case 2:
                        r.accept();
                        System.out.print("\nEnter number of rooms you want
to book:");
                       num rooms = s.nextInt();
                        ValidNumRooms(num rooms);
                        System.out.print("\nEnter number of days you prefer
to stay:");
                       days = s.nextInt();
                        r.calculation(num rooms, days);
                 break;
                  case 3:
                        d.accept();
                        System.out.print("\nEnter number of rooms you want
to book:");
                       num rooms = s.nextInt();
                        ValidNumRooms (num rooms);
                        System.out.print("\nEnter number of days you prefer
to stay:");
                        days = s.nextInt();
                        d.calculation(num rooms, days);
                 break:
                  case 4:
                        1.accept();
                        System.out.print("\nEnter number of rooms you want
to book:");
                        num rooms = s.nextInt();
                        ValidNumRooms(num rooms);
```

```
System.out.print("\nEnter number of days you prefer
to stay:");
                        days = s.nextInt();
                         1.calculation(num rooms, days);
                  break;
                  case 5:
                        h.food();
                  break;
                  case 6:
                        h.Information();
                        h.payment();
                  break;
                  case 7:
                        h.workload();
                  break:
                  case 8:
                        h.leave();
                  break;
                  case 9:
                        h.salary();
                        System.out.println("\nJob done by Manager");
                        h.acc handling();
                  break;
  } while (ch!=10);
 System.out.println("Do visit us again!\nTHANK YOU!");
}
```

Output

```
WELCOME TO ROSEWOOD HOTELS AND RESORTS
_____Where cozy memory lasts_____

CHOOSE AN OPTION TO PROCEED FURTHER
____Bill generation____
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5) Order Food
6) Payment Process
7) Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
```

```
Enter your choice:1
Enter first name of the customer: Gauri
Enter last name of the customer: Kardekar
Enter mobile number of the customer:1234567890
Enter email id of the customer:gk123@gmail.com
Select type of id proof:
1) Aadhar card
2) Passport
3) Driving License
4) Pan card
Enter choice:1
Enter the id number: 123456789012
Enter number of days you prefer to stay: 3
Selected room type is default
Bill generated for default days (one day):Rs.9000/-
CHOOSE AN OPTION TO PROCEED FURTHER
   Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5)Order Food
6) Payment Process
7)Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
Enter your choice: 4
Enter first name of the customer: Gauri
Enter last name of the customer: Kardekar
Enter mobile number of the customer: 1234567890
Enter email id of the customer:gk12@yahoo.com
Select type of id proof:
1) Aadhar card
2) Passport
3) Driving License
4) Pan card
Enter choice:2
Enter the id number: WQ123455
Enter number of rooms you want to book: 2
Entered number of rooms is valid
Enter number of days you prefer to stay:5
Selected room type is Luxury
Bill generated:Rs.75000/-
CHOOSE AN OPTION TO PROCEED FURTHER
```

```
Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5)Order Food
6) Payment Process
7)Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
Enter your choice:5
Welcome to Rosewood Restaurant
1. Chicken Dishes
2. Vegetarian Dishes
3. Starters
4. Indian Bread
5.Chinese food
Enter your choice
1. Chicken Tikka Masala
2. Chicken Korma
3. Butter Chicken
4. Chicken Biryani
5. Chicken Jalfrezi
Enter your choice
Chicken Biryani
Price: Rs. 400
CHOOSE AN OPTION TO PROCEED FURTHER
  Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5) Order Food
6) Payment Process
7)Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
Enter your choice:6
**CUSTOMER'S INFORMATION**
Customer's information is successfully entered in record
**PAYMENT OPTIONS**
Customer can choose any payment options from below list:
1.ONLINE MODE
2.CASH
3.DEBIT/CREDIT CARD
______
CHOOSE AN OPTION TO PROCEED FURTHER
  Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
```

```
5) Order Food
6) Payment Process
7)Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
Enter your choice: 7
**WORKLOAD OF HOTEL EMPLOYEES**
Room service is available 24/7
Helper works 9 hours per day
Hotel staff works 11 hours per day
CHOOSE AN OPTION TO PROCEED FURTHER
  Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5)Order Food
6) Payment Process
7)Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
Enter your choice:8
Hotel employees take leave for:
1. EMERGENCY LEAVE
2. SICK LEAVE
3. EARNED LEAVE
CHOOSE AN OPTION TO PROCEED FURTHER
  Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5)Order Food
6) Payment Process
7)Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
Enter your choice:9
**SALARY**
1.Manager- Rs 35,000/month
2. Hotel Staff- Rs 15,000/month
3.Chef- Rs 20,000/month
4.Helper- Rs 10,000/month
         _____
Job done by Manager
Manager looks after account handling
Manager takes care of inconvience issue raised by customer
Manager manages employees and for planning, coordinating hotel services
```

```
CHOOSE AN OPTION TO PROCEED FURTHER
   Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5) Order Food
6) Payment Process
7)Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
Enter your choice: 3
Enter first name of the customer: Gauri
Enter last name of the customer: Kardekar
Enter mobile number of the customer:1234567890
Enter email id of the customer:gkkk@gmail.com
Select type of id proof:
1) Aadhar card
2) Passport
3) Driving License
4) Pan card
Enter choice: 3
Enter the id number: 12345612
Enter number of rooms you want to book: 0
Exception in thread "main" java.lang.NullPointerException: Cannot throw
exception because "com.hotel.management.Execution.NullPointerException" is
null
      at com.hotel.management.Execution.ValidNumRooms(Hotel.java:386)
      at com.hotel.management.Execution.main(Hotel.java:437)
|__||_||_||_|
|\| |_||_||_|| \/\/||_|||_|/
WELCOME TO ROSEWOOD HOTELS AND RESORTS
    Where cozy memory lasts
CHOOSE AN OPTION TO PROCEED FURTHER
   Bill generation
1) For default suite
2) For regular suite
3) For Deluxe suite
4) For Luxury Suite
5) Order Food
6) Payment Process
7) Workload
8) Leave availables for employees
9) Displaying Salary
10) EXIT
```

Enter your choice:10 Do visit us again! THANK YOU! **23** | Page