```
#2d list to hold table orders
tables = [["TABLE 1 - ", 0],["TABLE 2 - ", 0],["TABLE 3 - ", 0],["TABLE 4 - ", 0],["TABLE 5 - ", 0],
["TABLE 6 - ", 0],["TABLE 7 - ", 0],["TABLE 8 - ", 0],["TABLE 9 - ", 0],["TABLE 10 - ", 0]]

#menu items stored as a dictionary
menu = ()
"Nachos": 5.50 ; "Soup":4.95;
"Burger":10.50 ; "Brisket": 12.50 ; "Ribs":15.00;
"Corn":2.50 ; "Fries":3.00 ; "Salad":3.25

#list is used so that the food options are in an order and easier to see.
#also stored as a dictionary so they can be found and stored more easily.

#receives input from user to collect server name and checks that it only contains letters

def get_server_name():
    flag = True

    while flag:

        server_name = input('Please enter your name: ')

        if server_name.isalphanumeric() == False:
            print("Sorry you have not entered a recognised name.")
            flag = True

        else:
            server_name = "Server name: {}".format(server_name.capitalize())
            flag = False

    return server_name
#always use 'True' instead of 'true' so that the word used can be defined.

#receives input from user for table number checks it is an integer and that it is within the correct range
def get_table_num():
        flag= True

        while flag:

            table_num = input('Enter table number:  ')

            try:
                input('Please enter your table number: ')
            except:
                print("Sorry, you did not enter a table number")
```

```
46                  flag = True
47              else:
48                  table_num = int(table_num)
49                  if table_num < 1 or table_num > 9:
50                      print("Table number must be between 1 and 10")
51                      flag = True
52                  else:
53                      flag = False
54
55          return table_num
56
57
58  #gets input of required menu item from user and validates it
59  def get_menu_item():
60      flag = True
61
62      while flag:
63
64          menu_item = input('Enter menu item. Type x if there are no more ↵
                items to enter: ')
65
66          if menu_item.isalpha() == False:
67              print("Sorry you have not entered a valid menu item.")
68              flag = True
69          elif menu_item == "x" or menu_item == "X":
70              flag = False
71          elif menu_item.capitalize() not in menu:
72              print("Sorry you have not entered a valid menu item.")
73              flag = True
74          else:
75              menu_item = menu_item.capitalize()
76              flag = False
77
78      return menu_item
79
80  #gets quantity of item required and validates the input
81  def get_qty():
82      flag= True
83
84      while flag:
85
86          qty = input('Enter quantity of item required:  ')
87
88          try:
89              int(qty)
90          except:
91              print("Sorry, quantity must be a whole number")
92              flag = True
93          else:
94                  qty = int(qty)
95                  if qty < 1:
96                      print("Quantity must be a whole number")
97                      flag = True
```

```
 98                 else:
 99                     flag = False
100
101     return qty
102 #When you want to order something, it has to be a WHOLE NUMBER ONLY, it can't be 1.5 burgers you are ordering.
103 #to make it more clear to the orderer, make sure to keep it to 'whole number' instead of 'positive number'.
104
105
106 #gets user input for discount to be applied
107 def get_discount_choice():
108     flag = True
109
110     while flag:
111
112
113         print("Please choose a discount if you are valid to one")
114         print(" Please select a discount below that you may be entitled to")
115         print(" 1. Early Bird: Monday - Friday 5pm-7pm - 15%")
116         print(" 2. Staff discount - 25%")
117         print(" 3. No discount")
118
119         discount_choice = input("Select a discount to apply:")
120
121         try:
122             int(discount_choice)
123         except:
124             print("Sorry, you did not enter a valid option")
125             flag = True
126         else:
127             discount_choice = int(discount_choice)
128             if discount_choice < 1 or discount_choice > 3:
129                 print("Discount option must be 1, 2 or 3 only")
130                 flag = True
131
132
133             else:
134                 if discount_choice == 1:
135                     discount = 15
136                 elif discount_choice == 2:
137                     discount = 25
138                 else:
139                     discount = 0
140
141                 flag = False
142
143     return discount
144
145 enter_order = True
146
147 while enter_order:
```

```
148
149     print("################################################")
150     print("#### Gurreb's BBQ order processing system  ####")
151     print("################################################")
152     print("")
153     print("############## Choose an option #################")
154     print("")
155     print("1. Enter customer order")
156     print("2. Output bill")
157     print("The Bill:")
158     print("3. Exit")
159     print("")
160
161     main_choice = input('Enter order here:')
162  #allows user to enter the customer's order
163     if main_choice == "1":
164         server_name = get_server_name()
165         table_num = get_table_num()
166         tables[table_num].append(server_name)
167         item_enter = True
168         subtotal = 0
169         tables[table_num-1].remove(0)
170
171 while item_enter:
172
173             item_choice = get_menu_item()
174
175             if item_choice == "X" or item_choice == "x":
176                 tables[table_num -1 ].append(subtotal)
177                 item_enter = False
178             else:
179                 quantity = get_qty()
180                 price = menu[item_choice]
181                 cost = price * quantity
182                 tables[table_num -1].append(item_choice)
183                 tables[table_num -1].append(quantity)
184                 tables[table_num -1].append(cost)
185                 subtotal = subtotal + (cost * quantity)
186
187 flag = False
188
189  #finds and outputs the required bill
190 if main_choice == "2":
191    table_num = get_server_name()
192    discount = get_discount_choice()
193    print(str(tables[table_num -1][0]))
194    print(str(tables[table_num -1][1]))
195    print("Summary of bill before discounts:")
196    print(str(tables[table_num -1][2:-1]))
197    print("Discount percentage applied to this bill = {} ".format
       (discount))
198
199
```

```
200  subtotal = float(tables[table_num -1][-1])
201  print("Subtotal before discount = Â£{}".format(subtotal))
202  final_total = subtotal - (subtotal*discount)
203  print("Final total after discount = Â£{}".format(final_total))
204  flag = False
205
206  if main_choice == "3":
207          exit()
208
209  else:
210          flag = True
```