Cash Register

1. **Assume that a local event coordinator asks you to write a Java application as a cash register to accept an event reservation with a payment option as cash only. This application must allow a clerk to enter required information and display output for details of reservation. It must also allow the clerk to enter an amount of cash received and display a change amount.**
   Required Information
   a. Customer's name which includes both first name and last name
   b. Date of reservation
   c. Number of ticket purchased
   d. Cash Received (After balance due is shown)

   Cost per one ticket is **$25.50**. The total cost of ticket purchased must include **a sales tax of 7%**. After a clerk enters all information, the program will calculate a balance due for the customer. Then it must allow the clerk to enter an amount of cash received from the customer which will be used to calculate the change amount returned to the customer.

   Sample Runs
   Note: Your application must prompt for the inputs and display the outputs exactly as shown below in the sample runs.

```
> run CashRegister
Event Ticket Reservation (Cash Only)
Name of Customer: John Doe
Date of Reservation: 02/25/2016
Number of Ticket(s): 6
Reservation Details
Name of Customer: John Doe
Date of Reservation: 02/25/2016
Number of Ticket(s): 6
Cost of Ticket(s) (25.50 x 6): $153.00
Sales Tax: $10.71
Balance Due: $163.71
Cash Received: $ 200.00
Change Due: $36.29
Thank you for your reservation.
```

```
> run CashRegister
Event Ticket Reservation (Cash Only)
Name of Customer: Jane Smith
Date of Reservation: 02/25/2016
Number of Ticket(s): 2
Reservation Details
Name of Customer: Jane Smith
Date of Reservation: 02/25/2016
Number of Ticket(s): 2
Cost of Ticket(s) (25.50 x 2): $51.00
Sales Tax: $3.57
Balance Due: $54.57
Cash Received: $ 60.00
Change Due: $5.43
Thank you for your reservation.
```

2. **Create a new Java file as a second version of the first program and add the following tasks in your new Java program:**
   a. **Apply a discount rate to cost of ticket to compute a discount amount.**
   b. **Include additional details of discount amount and total cost after discount in Reservation Details printout as shown in the sample runs below.**

Note: Sale tax of 7% is now applied to total cost after discount instead of cost of ticket.

Number of Tickets Purchased	Discount Rates Before Tax
1-5	0%
6-10	5%
11 and above	10%

Sample Runs:

```
> run CashRegisterWithDiscount
Event Ticket Reservation (Cash Only)
Name of Customer: David Brown
Date of Reservation: 02/25/2016
Number of Ticket(s): 5

Reservation Details
Name of Customer: David Brown
Date of Reservation: 02/25/2016
Number of Ticket(s): 5
Cost of Ticket(s) (25.50 x 5): $127.50
Discount: ($0.00)
Total Cost: $127.50
Sales Tax: $8.93
Balance Due: $136.43
Cash Received: $ 140.00

Change Due: $3.57
Thank you for your reservation.
```

```
> run CashRegisterWithDiscount
Event Ticket Reservation (Cash Only)
Name of Customer: John Doe
Date of Reservation: 02/25/2016
Number of Ticket(s): 6

Reservation Details
Name of Customer: John Doe
Date of Reservation: 02/25/2016
Number of Ticket(s): 6
Cost of Ticket(s) (25.50 x 6): $153.00
Discount: ($7.65)
Total Cost: $145.35
Sales Tax: $10.17
Balance Due: $155.52
Cash Received: $ 160.00

Change Due: $4.48
Thank you for your reservation.
```

```
> run CashRegisterWithDiscount
Event Ticket Reservation (Cash Only)
Name of Customer: Jane Smith
Date of Reservation: 02/25/2016
Number of Ticket(s): 12

Reservation Details
Name of Customer: Jane Smith
Date of Reservation: 02/25/2016
Number of Ticket(s): 12
Cost of Ticket(s) (25.50 x 12): $306.00
Discount: ($30.60)
Total Cost: $275.40
Sales Tax: $19.28
Balance Due: $294.68
Cash Received: $ 300.00

Change Due: $5.32
Thank you for your reservation.
```