Section 2

Question 1
Solution:

```java
class Grade{
     public static void main(String args[]){
          int score = 89;
          if(score>90){
               System.out.println("A");
          }else if(score>=80 && score<=89){
               System.out.println("B");
          }else if(score>=70 && score<=79){
               System.out.println("C");
          }else if(score>=60 && score<=69){
               System.out.println("D");
          }else{
               System.out.println("F");
          }
     }
}
```

Question 2
Solution:

```java
class Day{
     public static void main(String args[]){
          int day = 4;
          switch(day){
               case 1:
                    System.out.println("Monday");
                    switch("weekday"){
                         case "weekday":
                         System.out.println("Weekday");
                         break;
                    }
               break;

               case 2:
                    System.out.println("Tuesday");
                    switch("weekday"){
                         case "weekday":
                         System.out.println("Weekday");
                         break;
                    }
               break;

               case 3:
                    System.out.println("Wednesday");
                    switch("weekday"){
                         case "weekday":
                         System.out.println("Weekday");
                         break;
                    }
               break;
```

```java
                    case 4:
                        System.out.println("Thursday");
                        switch("weekday"){
                                case "weekday":
                                System.out.println("Weekday");
                                break;
                        }
                    break;

                    case 5:
                        System.out.println("Friday");
                        switch("weekday"){
                                case "weekday":
                                System.out.println("Weekday");
                                break;
                        }
                    break;

                    case 6:
                        System.out.println("Saturday");
                        switch("weekend"){
                                case "weekend":
                                System.out.println("Weekend");
                                break;
                        }
                    break;

                    case 7:
                        System.out.println("Sunday");
                        switch("weekend"){
                                case "weekend":
                                System.out.println("Weekend");
                                break;
                        }
                    break;

                    default:
                        System.out.println("Invalid");
                    break;
                }
        }
}
```

Question 3
Solution:
```java
class Calc{
      public static void main(String args[]){
            int a,b;
            a = 20;
            b = 10;
            char op = '/';
            switch(op){
                    case '+':
                    System.out.println(a+b);
                    break;
                    case '-':
```

```
                System.out.println(a-b);
                break;
                case '/':
                if(b!=0){
                System.out.println(a/b);
                }else{
                        System.out.println("Error: Division by zero is not
                        allowed.");
                }
                break;
                case '*':
                System.out.println(a*b);
                break;
                default:
                System.out.println("Invalid expression");
                break;
            }
        }
}
```

Question 4
Solution:

```
public class Discount{
      public static void main(String args[]){
            double discount;
            double price=666.0;
            boolean mem = true;
            if(price>=1000){
                    discount = 20.0;
            }
            else if (price >=500 && price<=999){
                    discount = 10.0;
            }
            else{
                    discount = 5.0;
            }
            if(mem){
                    discount +=5.0;
            }

            double finalPrice = price - (price*(discount/100));

            System.out.println(finalPrice);
        }
}
```

Question 5
Solution:

```
public class StudentPassFail{
      public static void main(String args[]){
            int a=50;
            int b=6;
            int c=45;

            if(a>=40 && b>=40 && c>=40){
```

```java
                    System.out.println("Passes");
            }
            else{
                    System.out.println("Fails");
            }
        }
}
```