```
Jan 13, 10 12:23
                                       Item.java
                                                                         Page 1/1
public class Item{ //Simply stores 5 strings
  String[] items = new String[5]; //Space for 5 items as per spec. Any more are
simply dropped
  public Item(String item0, String item1, String item2, String item3, String it
em4) {
      /*Just have all items as constructor arguments to save time */
      items[0] = item0;
      items[1] = item1;
      items[2] = item2;
      items[3] = item3;
      items[4] = item4;
  //Main purpose of this class is to provide a quick method get a string repres
entation
   //of the array or "shopping list"
  public String toString(){
      String result = "Items:\n";
      for(String element : items){
        result = String.format("%s\n%s", result, element);
      return result;
```

```
List.java
  Jan 13, 10 12:29
                                                                                                                                                                                          Page 1/1
//Simple abstract class for method prototypes
public abstract class List(
   public abstract Item getWeekday();
   public abstract Item getWeekend();
   public abstract Item getSummer();
   public abstract Item getWinter();
        public abstract String toString();
```

```
Singleperson.java
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                                                                                 Page 1/1
//Again, not much to see here
public class Singleperson extends List{
   public Item getWeekday(){
   return new Item("Sandwich","Rashers","Apple","Milk","Wine");
   } //Hardest part was picking what to put on each shopping list.
     //Do I really think all single people are lushes who down a bottle of wine
each night?
   public Item getWeekend(){
      return new Item("Pizza", "Beer", "Orange Juice", "TV Guide", "Vitamins");
   public Item getSummer(){
      return new Item("Sun Protection", "Ice", "Swimsuit", "Wine", "Cooler");
   public Item getWinter(){
      return new Item("Coat", "Scarf", "Attractive Hat", "Coal", "Oranges");
   public String toString(){
      return "Single Person";
```

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```
ListMaker.java
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                                                                          Page 1/2
import java.util.InputMismatchException;
import java.util.Scanner;
class ListMaker{
   static Scanner sc = new Scanner(System.in);
   public static void main(String Args[]){
     List shoppinglist = new Singleperson();
                                                          //Init here to stop the
compiler moaning.
     shoppinglist = setProfile(shoppinglist);
                                                          //Set shopper profile (S
ingle, Married, Retired)
     System.out.printf("\n%s selected\n", shoppinglist);//Return string representati
on of profile to user
     Item finalList = getShoppingList(shoppinglist);
                                                          //Set circumstances. Thi
s returns an array of strings
                                                          //in a container class "
Item"
     System.out.printf("\n%s\n",finalList);
                                                        //Calls the Items toStrin
g method and prints the result
   //Set shopper profile by casting list to profile selected by user
   public static List setProfile(List list){
     int selection;
     boolean valid = false;
     while(!valid){
        try{
            System.out.printf("Please select profile type:\nRetired(1)\nSingle(2)\nMarried(3)\nChoose:
");
            selection = sc.nextInt();
            valid = true; //Assume true for the moment
        }catch (InputMismatchException inputMismatchException) {
            selection = 0; //Stop the program from crashing, but keep "invalid"
input
            //System.err.printf("\nException; %s\n", inputMismatchException); Be
tter to hide mess from user?
            sc.nextLine(); //Discard input so user can try again
                            //Using the switch to handle invalid input
        switch(selection){
           case 1 : list = new Retired(); break;
           case 2 : list = new Singleperson(); break;
           case 3 : list = new MarriedCouple(); break;
           default :
              System.out.printf("Invalid choice\n");
              valid = false;
              break;
     return list;
   //Returns the given lists Item(s), More or less the same as setProfile
   public static Item getShoppingList(List list){
      int selection;
      Item result = list.getWeekday(); //Init here to get the compiler to shut
      boolean valid = false;
      while(!valid){
```

```
ListMaker.java
 Jan 13, 10 12:38
                                                                             Page 2/2
         try
             System.out.printf("Please enter circumstances:\nWeekday(1)\nWeekend(2)\n");
            System.out.printf("Summer Holiday(3)\nWinter Holiday(4)\nChoose:");
             selection = sc.nextInt();
             valid = true;
         }catch (InputMismatchException InputMismatchException) {
             selection = 0;
             sc.nextLine();
         switch(selection) {
            case 1 : result = list.getWeekday(); break;
             case 2 : result = list.getWeekend(); break;
             case 3 : result = list.getSummer(); break;
             case 4 : result = list.getWinter(); break;
             default :
                System.out.printf("Invalid choice\n");
                valid = false;
                break;
      return result;
    //End class ListMaker
//}
```

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Jan 13, 10 13:05	output.txt	Page 1/1
<pre>/* First Run */ Please select profile type: Retired(1) Single(2) Married(3) Choose : Retired Person selected Please enter circumstances: Weekday(1) Weekend(2) Summer Holiday(3) Winter Holiday(4) Choose : Items:</pre>	•	
Strong Sun Protection Book Towel Straw Hat Water		
<pre>/*Second Run */ Please select profile type: Retired(1) Single(2) Married(3) Choose : Married Couple selected Please enter circumstances: Weekday(1) Weekend(2) Summer Holiday(3) Winter Holiday(4) Choose : Items:</pre>		
Baby Food Pasta Chicken Milk Nappies		
<pre>/*Third Run*/ Please select profile type: Retired(1) Single(2) Married(3) Choose : Single Person selected Please enter circumstances: Weekday(1) Weekend(2) Summer Holiday(3) Winter Holiday(4) Choose : Items:</pre>		
Coat Scarf Attractive Hat Coal Oranges		