***Assignment 2A – pseudocodes***

ABSTRACT CLASS Vacation

BEGIN

CREATE double budget

CREATE String destination

CONSTRUCTOR Vacation(double budget, String destination)

BEGIN

this.budget🡨budget

this. destination🡨destination

END CONSTRUCTOR

ABSTRACT METHOD compareBudget()

METHOD toString()

BEGIN

String a🡨“Budget: $”+this.budget+“\nCompare Budget: $”+this.compareBudget( )+“\nDestination: ”+this.destination

RETURN a

END METHOD

END CLASS

CLASS AllInclusiveVacation extends Vacation

BEGIN

CREATE String brand

CREATE double rating

CREATE double price

CONSTRUCTOR AllInclusiveVacation(double budget, String destination, String brand, double rating, double price)

BEGIN

super(budget, destination)

this.brand🡨brand

this.rating🡨rating

this.price🡨price

END CONSTRUCTOR

METHOD double compareBudget( )

BEGIN

RETURN this.budget-this.price

END METHOD

METHOD toString( )

BEGIN

String a🡨“Budget: $”+this.budget+ “\nCompare Budget: $”+this.compareBudget()+“\nDestination:”+this.destination+“\nBrand: ”+this.brand+“\nRating :”+this.rating+ “ stars\nPrice :$”+this.price

RETURN a

END METHOD

END CLASS

CLASS PiecemealVacation extends Vacation

BEGIN

CREATE String[] items

CREATE double[] costs

CONSTRUCTOR PiecemealVacation(double budget, String destination, String[] items, double[] costs)

BEGIN

super(budget,destination)

this.items🡨items

this.costs🡨costs

END CONSTRUCTOR

METHOD totalCost()

BEGIN

CREATE total🡨0

FOR(i🡨0;i<costs.length;i🡨i+1)

Total🡨total+costs[i]

END FOR

RETURN total

END METHOD

METHOD compareBudget( )

BEGIN

RETURN this.budget-this.totalCost( )

END METHOD

METHOD toString( )

BEGIN

String a🡨 “Budget: $”+this.budget+ “\nCompare Budget: $”+this.compareBudget( )+ “\nDestination: ”+this.destination+ “\nHotel: ”+items[0]+ “ $”+costs[0]+ “\nMeal: ”+items[1]+ “ $”+costs[1]+ “\nAirfare: ” +items[2]+ “ $”+costs[2]

RETURN a

END METHOD

END CLASS

CLASS testVacation

BEGIN

METHOD main( )

BEGIN

CREATE v1 as AllInclusiveVacation

v1🡨new AllInclusiveVacation(5000.00, “France”, “ClubMed”, 4.00, 4500.00)

CREATE v2 as AllInclusiveVacation

v2🡨new AllInclusiveVacation(5000.00, “Germany”, “Delta Vacations”, 3.00, 6000.00)

CREATE String[] items

CREATE double[] costs

items🡨{“Hotel Palace”, “Street Vendors”, “United Airlines”}

costs🡨{2000.00, 1000.00, 1500.00}

CREATE v3 as PiecemealVacation

v3🡨new PiecemealVacation(5000.00, “Japan”, items, costs)

CREATE String[] items1

CREATE double[] costs1

items1🡨{“East Point Hotel”, “Hotel Buffet”, “Delta Airlines”}

costs1🡨{3000.00, 500.00, 2000.00}

CREATE v4 as PiecemealVacation

v4🡨new PiecemealVacation(5000.00, “Australia”, items1, costs1)

PRINT(v1.toString( ))

PRINTLINE( )

PRINT(v2.toString( ))

PRINTLINE( )

PRINT(v3.toString( ))

PRINTLINE( )

PRINT(v4.toString( ))

END MAIN( )

END CLASS