**package** assignment.exercise;

**import** java.util.Scanner;

**public** **class** Program1 {

**public** **static** **void** main(String[] args) {

String type;

**int** units = 0;

**int** billAmount;

Scanner input = **new** Scanner(System.***in***);

System.***out***.println("Enter the type(House / Commerical) : ");

type = input.next();

**boolean** validType = type.equalsIgnoreCase("House") || type.equalsIgnoreCase("Commercial");

**while** (!validType) {

System.***out***.println("Enter valid type : ");

type = input.next();

validType = type.equalsIgnoreCase("House") || type.equalsIgnoreCase("Commercial");

}

System.***out***.println("Enter no of units used : ");

units = input.nextInt();

**while** (units < 0 || units > 200) {

System.***out***.println("Enter value between 0 and 200: ");

units = input.nextInt();

}

input.close();

**if** (type.equalsIgnoreCase("House")) {

**if** (units < 100) {

billAmount = units \* 3;

} **else** {

billAmount = units \* 4;

}

} **else** {

**if** (units < 100) {

billAmount = units \* 10;

} **else** {

billAmount = units \* 20;

}

}

System.***out***.println("Final Bill is : " + billAmount);

}

}

**package** assignment.exercise;

**import** java.util.Scanner;

**public** **class** Program2 {

**public** **static** **void** main(String[] args) {

String item;

**int** noOfPlates = 0;

**int** billAmount = 0;

Scanner input = **new** Scanner(System.***in***);

System.***out***.println("Enter item you want to buy (Dosa / idli / Pongal) : ");

item = input.next();

**boolean** validItem = item.equalsIgnoreCase("Dosa") || item.equalsIgnoreCase("idli")

|| item.equalsIgnoreCase("Pongal");

**while** (!validItem) {

System.***out***.println("Enter valid item : ");

item = input.next();

validItem = item.equalsIgnoreCase("Dosa") || item.equalsIgnoreCase("idli")

|| item.equalsIgnoreCase("Pongal");

}

System.***out***.println("Enter no of plates : ");

noOfPlates = input.nextInt();

**while** (noOfPlates < 0) {

System.***out***.println("Enter postive value: ");

noOfPlates = input.nextInt();

}

input.close();

**switch** (item.toUpperCase()) {

**case** "DOSA":

billAmount = noOfPlates \* 20;

**break**;

**case** "IDLI":

billAmount = noOfPlates \* 10;

**break**;

**case** "PONGAL":

billAmount = noOfPlates \* 30;

**break**;

**default**:

// Code will never come here

}

System.***out***.println("Final Bill is : " + billAmount);

}

}

**package** SeleniumExercise;

**import** java.util.Scanner;

**public** **class** Program3{

**public** **static** **void** main(String args[]) {

**int** x;

Scanner sc=**new** Scanner(System.***in***);

System.***out***.println("Enter the month");

x=sc.nextInt();

**if**(x==1 || x==2 || x==3 ||x==4)

{

System.***out***.println("Summer");

}

**else** **if**(x==5 || x==6 || x==7 ||x==8)

{

System.***out***.println("Winter");

}

**else** **if**(x==9 || x==10 || x==11 ||x==12)

{

System.***out***.println("Rainy");

}

**else**

{

System.***out***.println("Invalid");

}

}

}

**package** assignment.exercise;

**package** SeleniumExercise;

**import** java.util.Scanner;

**public** **class** PrimeExample

{

**public** **static** **void** main(String args[])

{

**int** i,m=0,flag=0;

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Enter a number :");

**int** n = sc.nextInt();

m=n/2;

**if**(n==0||n==1)

{

System.***out***.println(n+" is not prime number");

}

**else**

{

**for**(i=2;i<=m;i++)

{

**if**(n%i==0){

System.***out***.println(n+" is not prime number");

flag=1;

**break**;

}

}

**if**(flag==0)

{

System.***out***.println(n+" is prime number"); }

}

}

}

**package** assignment.exercise;

**public** **class** Program5 {

**public** **static** **void** main(String[] args) {

**int** num = 10, sum = 0, multiply = 1;

**for** (**int** i = 1; i <= num; i++) {

sum = sum + i;

}

System.***out***.println("Sum of first 10 numbers is: " + sum);

**for** (**int** i = 1; i <= num; i++) {

multiply = multiply \* i;

}

System.***out***.println("Multiplication of first 10 numbers is: " + multiply);

}

}

**package** assignment.exercise;

**import** java.util.stream.IntStream;

**public** **class** Program6 {

**public** **static** **void** main(String[] args) {

**int**[] a = { 10, 5, 5, 10, 20, 30 };

**int** sum = IntStream.*of*(a).sum();

System.***out***.println("Sum of numbers in the array is: " + sum);

**int** multiply = 1;

**for** (**int** num : a) {

multiply = multiply \* num;

}

System.***out***.println("Multiplication of numbers in the array is: " + multiply);

}

}

**package** assignment.exercise;

**public** **class** Program7 {

**public** **static** **void** main(String args[])

{

**int** a[]={1,3,5,6,8,2};

System.***out***.println("Odd Numbers:");

**for**(**int** i=0;i<a.length;i++){

**if**(a[i]%2!=0){

System.***out***.println(a[i]);

}

}

System.***out***.println("Even Numbers:");

**for**(**int** i=0;i<a.length;i++){

**if**(a[i]%2==0){

System.***out***.println(a[i]);

}

}

}}

**package** assignment.exercise;

**public** **class** Program8 {

**public** **static** **void** main(String[] args) {

**int**[] a = { 10, 5, 5, 10, 20, 30, 60, 60, 60 };

**int** duplicateCount = 0;

**int** j = 0, count, recount, temp;

**for** (**int** i = 0; i < a.length; i++) {

count = 0;

recount = 0;

j = i + 1;

**while** (j < a.length) {

**if** (a[i] == a[j])

count++;

j++;

}

**if** (count > 0) {

temp = a[i];

**for** (**int** x = 0; x < i; x++) {

**if** (a[x] == temp)

recount++;

}

**if** (recount == 0) {

duplicateCount++;

System.***out***.println(+a[i] + " : " + count + " times");

}

}

}

System.***out***.println("Total number of duplicates: " + duplicateCount);

}

}