Software Development Bootcamp

1.2

**Task 1**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

double celsius;

double farenheit;

Scanner input = new Scanner(System.in);

celsius = input.nextDouble();

farenheit = (9.0/5\*celsius+32);

System.out.print("The temperature is " + farenheit);

}

}

**Task 2**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter the radius and length of the cylinder.");

double radius = input.nextDouble();

double length = input.nextDouble();

double pie = 3.14;

double area = (radius\*radius\*pie);

double volume = (area\*length);

System.out.print("The area is " + area);

System.out.print("The volume is " + volume);

}

}

**Task 3**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter the value in feet.");

double feet = input.nextDouble();

double meters = feet\*0.305;

System.out.print("The value in meters " + meters);

}

}

**Task 4**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter the value in pounds.");

double pounds = input.nextDouble();

double kg = pounds\*0.454;

System.out.print("The value in kg is " + kg);

}

}

**Task 5**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter subtotal and gratuity percentage");

double subtotal = input.nextDouble();

double gratuity = input.nextDouble();

double gratuityTotal = subtotal\*(gratuity/100);

double finalTotal = gratuityTotal + subtotal;

System.out.print("The final subtotal is " + finalTotal);

System.out.print("The gratuity total is " + gratuityTotal);

}

}

**Task 6**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter a number between 0 and 1000");

int number = input.nextInt();

int total = (number/100) + (number/10 % 10) + (number % 10);

System.out.print("The total for the digits are " + total);

}

}

**Task 7**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter the amount of minutes");

int minutes = input.nextInt();

int years = minutes/525600;

int daysRemainder = minutes % 525600;

int days = minutes/1440;

System.out.print("There is " + years + " year/s and " + daysRemainder + " minutes in " + minutes + " minutes");

System.out.print(" There is " + days + " day/s in " + minutes + " minutes");

}

}

**Task 8**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter the weight in kg of the water");

double water = input.nextDouble();

System.out.print("Enter the inital temp of the water");

double initialTemp = input.nextDouble();

System.out.print("Enter the final temp of the water");

double finalTemp = input.nextDouble();

double energy = water\*(finalTemp - initialTemp)\*4184;

System.out.print("The energy required to boil this water" + energy);

}

}

**Task 9**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter the monthly amount you want to invest");

double money = input.nextDouble();

double moneyMonth1 = money\*(1+0.00417);

double moneyMonth2 = (100+moneyMonth1)\*(1+0.00417);

double moneyMonth3 = (100+moneyMonth2)\*(1+0.00417);

double moneyMonth4 = (100+moneyMonth3)\*(1+0.00417);

double moneyMonth5 = (100+moneyMonth4)\*(1+0.00417);

double moneyMonth6 = (100+moneyMonth5)\*(1+0.00417);

//Would use iteration here but wanted to only use what we were taught

System.out.print("The value after 6 months is" + moneyMonth6);

}

}

**Task 10**

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("Enter the weight in pounds");

double weightPounds = input.nextDouble();

System.out.print("Enter the height in inches");

double heightInches = input.nextDouble();

double weightKg = weightPounds \* 0.45359237;

double heightMetres = heightInches \* 0.0254;

double squareHeight = heightMetres\*heightMetres;

double BMI = weightKg/squareHeight;

System.out.print("The BMI is " + BMI);

}

}