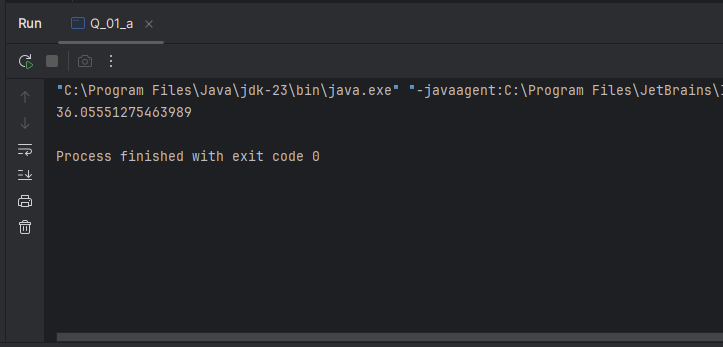
Q1.a.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_01;***  ***public class Q\_01\_a {***  ***public static void main(String[] args) {***  ***//a***  ***double B = 10, A = 20 , C = 15;***  ***System.out.println(Math.sqrt(( B \* B) + (4 \* A \*C )));***  ***}***  ***}*** |

Output:

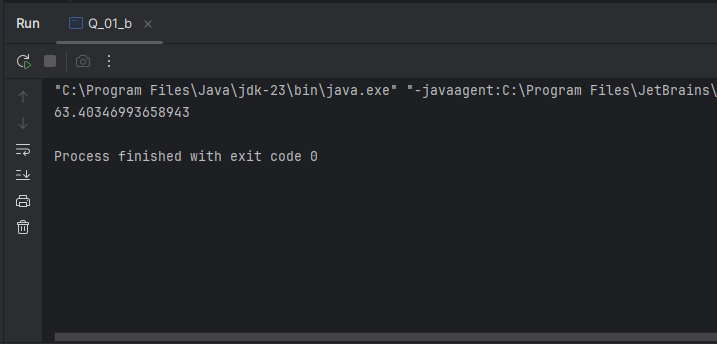


Q1.b.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_01;***  ***public class Q\_01\_b {***  ***public static void main(String[] args) {***  ***//b***  ***double X = 20 , Y = 10;***  ***System.out.println(Math.sqrt(X + (4 \* Y \* Y \* Y)));***  ***}***  ***}*** |

Output:

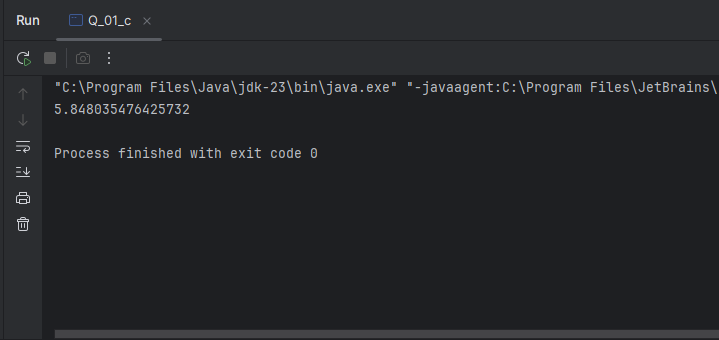


Q1.c.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_01;***  ***public class Q\_01\_c {***  ***public static void main(String[] args) {***  ***//c***  ***double X = 20 , Y = 10;***  ***System.out.println(Math.cbrt(X \* Y));***  ***}***  ***}*** |

Output:

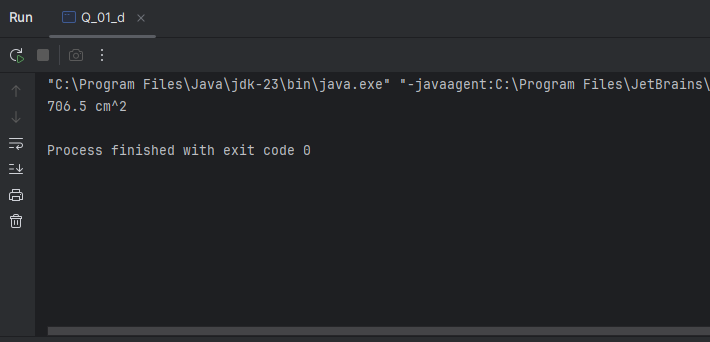


Q1.d.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_01;***  ***public class Q\_01\_d {***  ***public static void main(String[] args) {***  ***//d***  ***final double pi = 3.14;***  ***double r = 15;***  ***System.out.println( pi \* r \* r + " cm^2");***  ***}***  ***}*** |

Output:

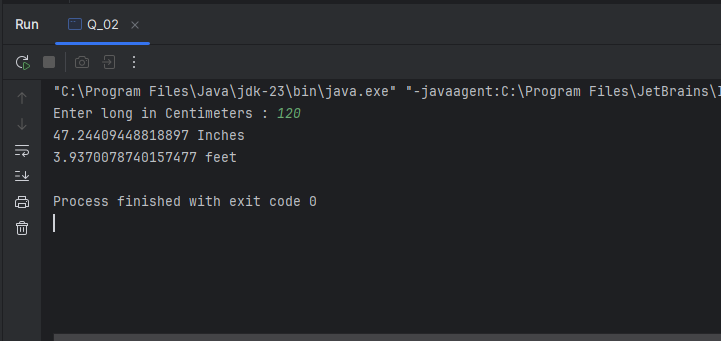


Q2.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_02;***  ***import java.util.Scanner;***  ***public class Q\_02 {***  ***public static void main(String[] args) {***  ***Scanner l = new Scanner(System.in);***  ***double cm;***  ***System.out.print("Enter long in Centimeters : ");***  ***cm = l.nextDouble();***  ***//Inches convert***  ***System.out.println(cm \* (1/2.54)+ " Inches");***  ***System.out.println((cm \* (1/2.54)) / 12 + " feet");***  ***}***  ***}*** |

Output:

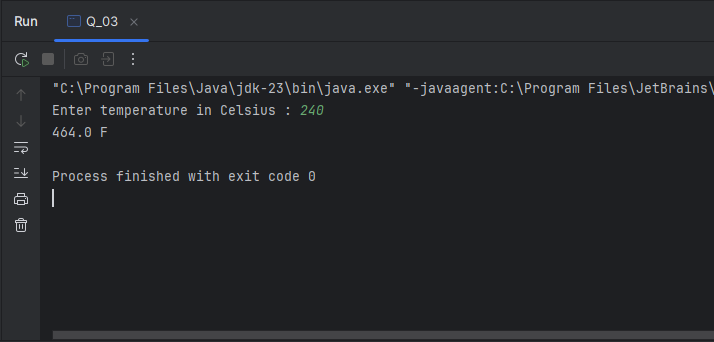


Q3.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_03;***  ***import java.util.Scanner;***  ***public class Q\_03 {***  ***public static void main(String[] args) {***  ***Scanner temp = new Scanner(System.in);***  ***double cel;***  ***System.out.print("Enter temperature in Celsius : ");***  ***cel = temp.nextDouble();***  ***System.out.println((1.8 \* cel) + 32 +" F");***  ***}***  ***}*** |

Output:

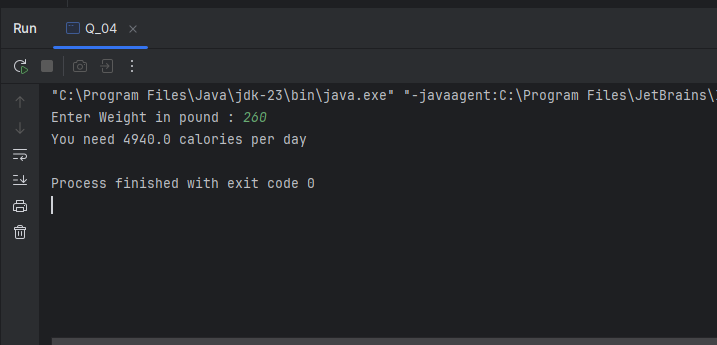


Q4.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_04;***  ***import java.util.Scanner;***  ***public class Q\_04 {***  ***public static void main(String[] args) {***  ***Scanner weight = new Scanner(System.in);***  ***double w;***  ***System.out.print("Enter Weight in pound : ");***  ***w = weight.nextDouble();***  ***System.out.println("You need " + (w \* 19) +" calories per day");***  ***}***  ***}*** |

Output:

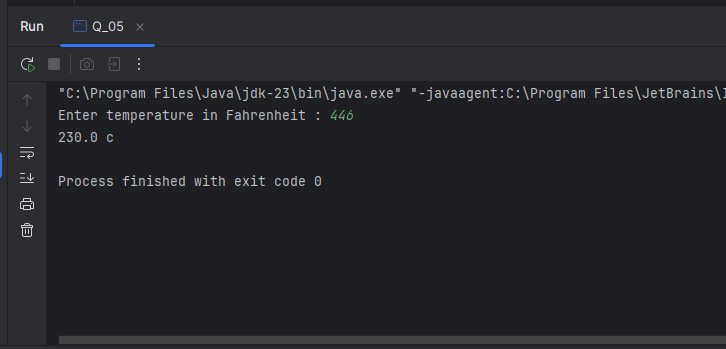


 Q5.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_05;***  ***import java.util.Scanner;***  ***public class Q\_05 {***  ***public static void main(String[] args) {***  ***Scanner temp = new Scanner(System.in);***  ***double F;***  ***System.out.print("Enter temperature in Fahrenheit : ");***  ***F = temp.nextDouble();***  ***double c = (F - 32) \* 5 / 9;***  ***System.out.println(c + " c");***  ***}***  ***}*** |

Output:

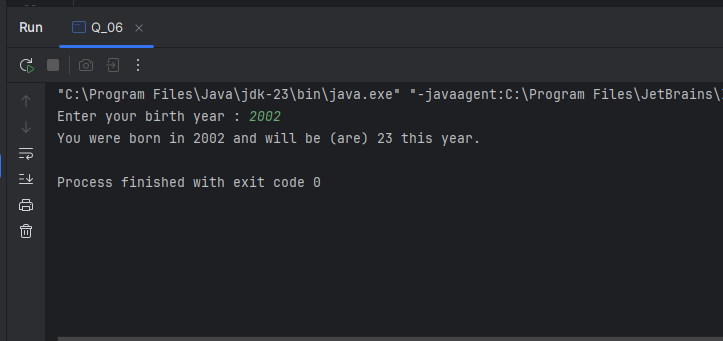


Q6.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_06;***  ***import java.text.SimpleDateFormat;***  ***import java.util.Date;***  ***import java.util.Scanner;***  ***public class Q\_06 {***  ***public static void main(String[] args) {***  ***Scanner year = new Scanner(System.in);***  ***int byear;***  ***System.out.print("Enter your birth year : ");***  ***byear = year.nextInt();***  ***Date today;***  ***SimpleDateFormat sdf;***  ***today = new Date( );***  ***sdf = new SimpleDateFormat("yyyy");***  ***int cyear = Integer.parseInt(sdf.format(today));***  ***System.out.println("You were born in " + byear + " and will be (are) " + (cyear - byear) + " this year.");***  ***}***  ***}*** |

Output:

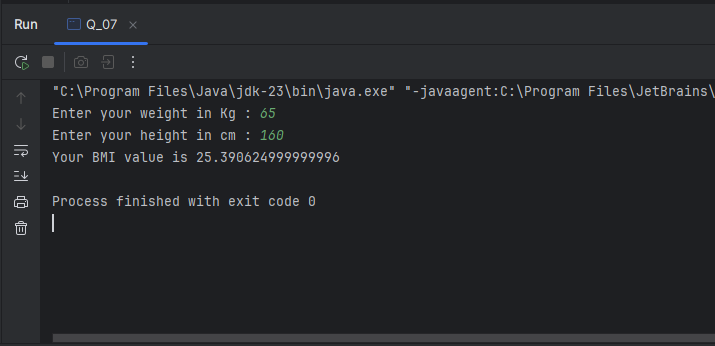


 Q7.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_07;  import java.util.Scanner; import static java.lang.Math.pow;  public class Q\_07 {  public static void main(String[] args) {   Scanner bmi = new Scanner(System.in);  int w;  System.out.print("Enter your weight in Kg : ");  w = bmi.nextInt();   int h;  System.out.print("Enter your height in cm : ");  h = bmi.nextInt();   double BMI = w / (pow(((double) h /100),2));   System.out.println("Your BMI value is " + BMI);  } }*** |

Output:

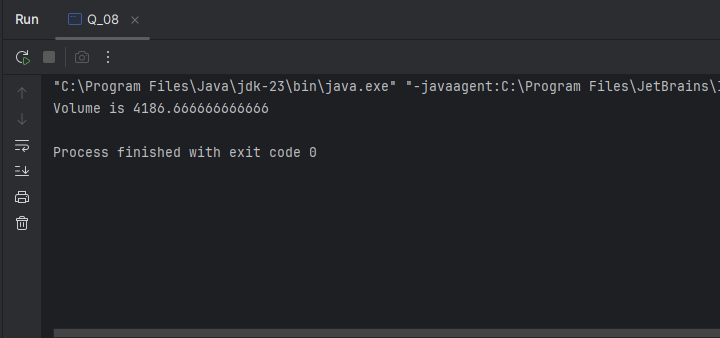


Q8.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_08;***  ***import static java.lang.Math.pow;***  ***public class Q\_08 {***  ***public static void main(String[] args) {***  ***final double PI = 3.14;***  ***double r = 10;***  ***double V = ((double) 4 /3) \* (PI \* pow(r,3));***  ***System.out.println("Volume is " + V );***  ***}***  ***}*** |

Output:

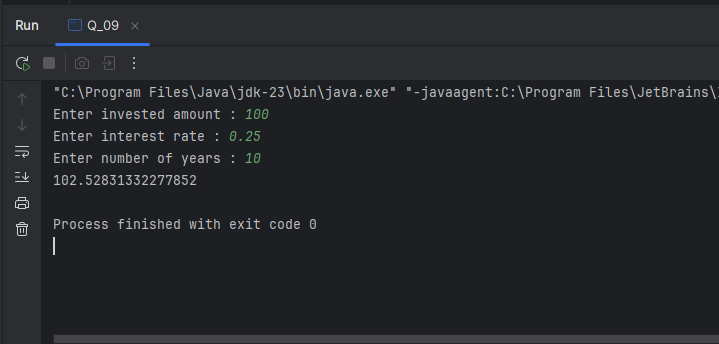


Q9.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_09;***  ***import java.util.Scanner;***  ***import static java.lang.Math.pow;***  ***public class Q\_09 {***  ***public static void main(String[] args) {***  ***Scanner inv = new Scanner(System.in);***  ***double P;***  ***System.out.print("Enter invested amount : ");***  ***P = inv.nextDouble();***  ***double R;***  ***System.out.print("Enter interest rate : ");***  ***R = inv.nextDouble();***  ***int N;***  ***System.out.print("Enter number of years : ");***  ***N = inv.nextInt();***  ***double grow =P \* pow((1+(R/100)),N);***  ***System.out.println(grow);***  ***}***  ***}*** |

Output:



Q10.

Code:

|  |
| --- |
| ***package LW\_02.src.Q\_10;***  ***import java.util.Scanner;***  ***import static java.lang.Math.pow;***  ***public class Q\_10 {***  ***public static void main(String[] args) {***  ***Scanner loan = new Scanner(System.in);***  ***double loanAmount;***  ***System.out.print("Enter loan amount : ");***  ***loanAmount = loan.nextDouble();***  ***double annualInterestRate;***  ***System.out.print("Enter annual interest rate : ");***  ***annualInterestRate = loan.nextDouble();***  ***double loanPeriod;***  ***System.out.print("Enter loan period : ");***  ***loanPeriod = loan.nextDouble();***  ***final int Month\_In\_Year = 12;***  ***double monthlyInterestRate = annualInterestRate /100.0 /Month\_In\_Year;***  ***double numberOfPayments = loanPeriod \* Month\_In\_Year;***  ***double monthlyPayment = (loanAmount \* monthlyInterestRate) / (1 - pow(1/(1+monthlyInterestRate),numberOfPayments));***  ***double totalPayment = monthlyPayment \* numberOfPayments;***  ***System.out.println("Monthly interest rate is "+ monthlyInterestRate);***  ***System.out.println("Number of payments is "+ numberOfPayments);***  ***System.out.println("Monthly payment is "+ monthlyPayment);***  ***System.out.println("Total payment is "+ totalPayment);***  ***}***  ***}*** |

Output:

