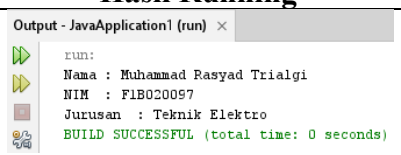
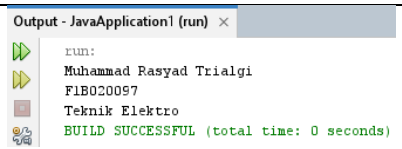
Nama : Muhammad Rasyad Trialgi
NIM : F1B020097
Kelompok : 4

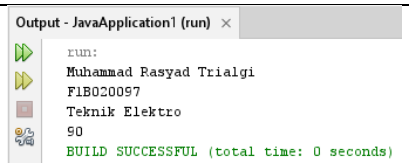
Jobsheet P3

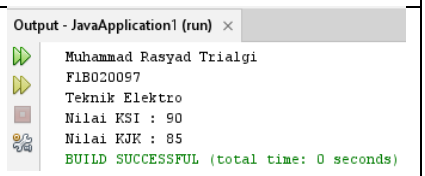
NO	Kegiatan	Script	Hasil Running

1	Method constructor membuat constructor tanpa parameter	`package P3;`
		
		`class Mahasiswa{`
		`  String nama;`
		`  String nim;`
		`  String jurusan;`
		
		`  Mahasiswa(){`
		`  System.out.println("Nama : Muhammad Rasyad Trialgi");`
		`  System.out.println("NIM : F1B020097");`
		`  System.out.println("Jurusan : Teknik Elektro");`
		`  }`
		`}`
		
		`public class cstanpaparameter{`
		`  public static void main (String[]args){`
		`  Mahasiswa mahasiswa1 = new Mahasiswa();`
		`  }`
		`}`
			

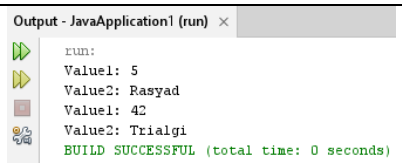
2	Method constructor membuat constructor dengan parameter	`package P3;`
		
		`class Mahasiswa{`
		`  String nama;`
		`  String nim;`
		`  String jurusan;`
		
		`  Mahasiswa(String inputNama, String inputNIM, String inputJurusan){`
		`  nama = inputNama;`
		`  nim = inputNIM;`
		`  jurusan = inputJurusan;`
		`  }`
		`}`
		
		`public class cstanpaparameter{`
		`  public static void main (String[]args){`
		`  Mahasiswa mahasiswa1 = new Mahasiswa("Muhammad Rasyad Trialgi", "F1B020097", "Teknik Elektro");`
		
		`System.out.println(mahasiswa1.nama);`
		
		`System.out.println(mahasiswa1.nim);`
		
		`System.out.println(mahasiswa1.jurusan);`
			

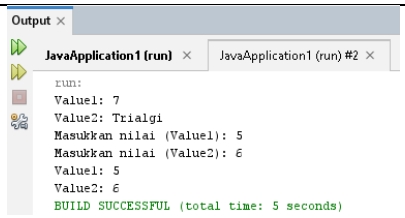
		} }	

3	Method constructor parameter yang berbeda	package P3;
		
		class Mahasiswa{
		String nama;
		String nim;
		String jurusan;
		int nilai;
		
		Mahasiswa(String inputNama, String inputNIM, String inputJurusan, int inputNilai){
		nama = inputNama;
		nim = inputNIM;
		jurusan = inputJurusan;
		nilai = inputNilai;
		}
		}
		
		public class cstanpaparameter{
		public static void main (String[]args){
		Mahasiswa mahasiswa1 = new Mahasiswa("Muhammad Rasyad Trialgi", "F1B020097", "Teknik Elektro", 90);
		
		System.out.println(mahasiswa1.nama);
		
		System.out.println(mahasiswa1.nim);
		
		System.out.println(mahasiswa1.jurusan);
		
		System.out.println(mahasiswa1.nilai);
		
		}
		}
			

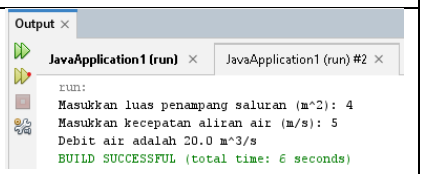
4	Method constructor gabungan	package P3;
		
		class Mahasiswa{
		String nama;
		String nim;
		String jurusan;
		
		Mahasiswa(String inputNama, String inputNIM, String inputJurusan){
		nama = inputNama;
		nim = inputNIM;
		jurusan = inputJurusan;
		
		}
		
		void ksi(){
		System.out.println(nama + "\n" + nim + "\n" + jurusan + "\n" + "Nilai KSI : 90");
		
		}
		
		void kjk(){
			

		System.out.println("Nilai KJK : 85");
		    }
		}
		
		public class cstanpaparameter{
		    public static void main (String[]args){
		        Mahasiswa mahasiswa1 = new Mahasiswa("Muhammad Rasyad Trialgi", "F1B020097", "Teknik Elektro");
		
		        mahasiswa1.ksi();
		        mahasiswa1.kjk();
		
		    }
		}	

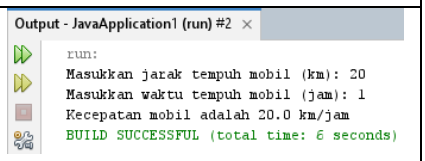
5	Method constructor dengan 2 constructor	package P3;
		
		public class MyClass {
		    private int value1;
		    private String value2;
		
		    public MyClass() {
		        value1 = 5;
		        value2 = "Rasyad";
		    }
		
		    public MyClass(int v1, String v2) {
		        value1 = v1;
		        value2 = v2;
		    }
		
		    public void displayValues() {
		        System.out.println("Value1: " + value1);
		        System.out.println("Value2: " + value2);
		    }
		
		    public static void main(String[] args) {
		        MyClass obj1 = new MyClass();
		        obj1.displayValues();
		
		        MyClass obj2 = new MyClass(42, "Trialgi");
		        obj2.displayValues();
		    }
		}
			

6	Method constructor dengan 2 constructor (input secara dinamis)	import java.util.Scanner;
		
		public class MyClass {
		    private int value1;
		    private String value2;
		
		    public MyClass(int v1, String v2) {
		        value1 = v1;
		        value2 = v2;
		    }
			

		public MyClass() {
		Scanner scanner = new Scanner(System.in);
		
		System.out.print("Masukkan nilai (Value1): ");
		int input1 = scanner.nextInt();
		scanner.nextLine();
		
		System.out.print("Masukkan nilai (Value2): ");
		String input2 = scanner.nextLine();
		
		value1 = input1;
		value2 = input2;
		}
		
		public void displayValues() {
		System.out.println("Value1: " + value1);
		System.out.println("Value2: " + value2);
		}
		
		public static void main(String[] args) {
		MyClass obj1 = new MyClass(7, "Trialgi");
		obj1.displayValues();
		
		MyClass obj2 = new MyClass();
		obj2.displayValues();
		}
		}	

7	Method constructor dengan perhitungan (menghitung debit air secara dinamis)	import java.util.Scanner;
		
		public class DebitAirCalculator {
		private double debitAir;
		
		public DebitAirCalculator(double luasPenampang, double kecepatanAliran) {
		debitAir = luasPenampang * kecepatanAliran;
		}
		
		public double getDebitAir() {
		return debitAir;
		}
		
		public static void main(String[] args) {
		Scanner scanner = new Scanner(System.in);
		
		System.out.print("Masukkan luas penampang saluran (m^2): ");
		double luasPenampang = scanner.nextDouble();
			

		System.out.print("Masukkan kecepatan aliran air (m/s): ");
		double kecepatanAliran = scanner.nextDouble();
		
		DebitAirCalculator calculator = new DebitAirCalculator(luasPenampang, kecepatanAliran);
		
		double debitAir = calculator.getDebitAir();
		System.out.println("Debit air adalah " + debitAir + " m^3/s");
		}
		}	

8	Method constructor dengan perhitungan (menghitung kecepatan mobil secara dinamis)	import java.util.Scanner;
		
		public class KecepatanMobilCalculator {
		private double kecepatan;
		
		public KecepatanMobilCalculator(double jarakTempuh, double waktuTempuh) {
		kecepatan = jarakTempuh / waktuTempuh;
		}
		
		public double getKecepatan() {
		return kecepatan;
		}
		
		public static void main(String[] args) {
		Scanner scanner = new Scanner(System.in);
		
		System.out.print("Masukkan jarak tempuh mobil (km): ");
		double jarakTempuh = scanner.nextDouble();
		
		System.out.print("Masukkan waktu tempuh mobil (jam): ");
		double waktuTempuh = scanner.nextDouble();
		
		KecepatanMobilCalculator calculator = new KecepatanMobilCalculator(jarakTempuh, waktuTempuh);
		
		double kecepatan = calculator.getKecepatan();
		System.out.println("Kecepatan mobil adalah " + kecepatan + " km/jam");
		}
		}
			

9	Method constructor perhitungan (menghitung energi potensial secara dinamis)	`import java.util.Scanner;`
		
		`public class EnergiPotensialCalculator {`
		`  private double energiPotensial;`
		
		`  public EnergiPotensialCalculator(double massa, double ketinggian, double gravitasi) {`
		`  energiPotensial = massa * gravitasi * ketinggian;`
		`  }`
		
		`  public double getEnergiPotensial() {`
		`  return energiPotensial;`
		`  }`
		
		`  public static void main(String[] args) {`
		`  Scanner scanner = new Scanner(System.in);`
		
		`  System.out.print("Masukkan massa benda (kg): ");`
		`  double massa = scanner.nextDouble();`
		
		`  System.out.print("Masukkan ketinggian (m): ");`
		`  double ketinggian = scanner.nextDouble();`
		
		`  System.out.print("Masukkan percepatan gravitasi (m/s^2): ");`
		`  double gravitasi = scanner.nextDouble();`
		
		`  EnergiPotensialCalculator calculator = new EnergiPotensialCalculator(massa, ketinggian, gravitasi);`
		
		`  double energiPotensial = calculator.getEnergiPotensial();`
		`  System.out.println("Energi potensial adalah " + energiPotensial + " joule");`
		`  }`
		`}`