

```

1  import java.util.*;
2
3  // Abstract Class Unit
4  abstract class Unit {
5      protected final int id; // final attribute
6      private String nama;
7      private double harga;
8      private boolean tersedia;
9
10     public Unit(int id, String nama, double harga, boolean tersedia) {
11         this.id = id;
12         this.nama = nama;
13         this.harga = harga;
14         this.tersedia = tersedia;
15     }
16
17     public final int getId() { // final method
18         return id;
19     }
20
21     public String getNama() {
22         return nama;
23     }
24
25     public void setNama(String nama) {
26         this.nama = nama;
27     }
28
29     public double getHarga() {
30         return harga;
31     }
32
33     public void setHarga(double harga) {
34         this.harga = harga;
35     }
36
37     public boolean isTersedia() {
38         return tersedia;
39     }
40
41     public void setTersedia(boolean tersedia) {
42         this.tersedia = tersedia;
43     }
44
45     // Abstract method
46     public abstract String getInfo();
47
48     // Overloading
49     public String getInfo(boolean lengkap) {
50         if (lengkap) {
51             return "ID: " + id + ", Nama: " + nama + ", Harga: Rp " + harga + ", Status: " + (tersedia ? "Ready" : "Rented") + ", Info Tambahan: " + getInfo();
52         } else {
53             return nama + " (Rp " + harga + ")";
54         }
55     }
56 }
57
58 // Child Class Excavator
59 class Excavator extends Unit {
60     private double Kapasitas;
61
62     public Excavator(int id, String nama, double harga, boolean tersedia, double Kapasitas) {
63         super(id, nama, harga, tersedia);
64         this.Kapasitas = Kapasitas;
65     }
66
67     public double getKapasitas() {
68         return Kapasitas;
69     }
70
71     public void setKapasitas(double Kapasitas) {
72         this.Kapasitas = Kapasitas;
73     }
74
75     @Override
76     public String getInfo() {
77         return "Kapasitas Bucket: " + Kapasitas + " m3";
78     }
79 }
80
81 // Child Class Bulldozer
82 class Bulldozer extends Unit {
83     private String tipeBlade;
84
85     public Bulldozer(int id, String nama, double harga, boolean tersedia, String tipeBlade) {
86         super(id, nama, harga, tersedia);
87         this.tipeBlade = tipeBlade;
88     }
89
90     public String getTipeBlade() {
91         return tipeBlade;
92     }
93
94     public void setTipeBlade(String tipeBlade) {
95         this.tipeBlade = tipeBlade;
96     }
97
98     @Override
99     public String getInfo() {
100         return "Tipe Blade: " + tipeBlade;
101     }
102 }
103

```

```

1 // final class POSTTEST
2 public final class POSTTEST {
3     private static Scanner scanner = new Scanner(System.in);
4     private static List<Unit> daftarUnit = new ArrayList<>();
5     private static int unitId = 1;
6
7     public static void main(String[] args) {
8         while (true) {
9             System.out.print("\033[2J");
10            System.out.println("=====Admin=====");
11            System.out.println("\nPenyewaan Alat Berat [CV.Bintang Jaya]");
12            System.out.println("1. Kelola Unit");
13            System.out.println("2. Keluar");
14            System.out.print("Pilih menu: ");
15            int pilihan = scanner.nextInt();
16            scanner.nextLine();
17
18            switch (pilihan) {
19                case 1:
20                    MUnit();
21                    break;
22                case 2:
23                    System.exit(0);
24                default:
25                    System.out.println("Pilihan tidak valid!");
26            }
27        }
28    }
29
30    private static void MUnit() {
31        while (true) {
32            System.out.println("\nPengelolaan Unit Sewa");
33            System.out.println("1. Tambah Unit");
34            System.out.println("2. Lihat Unit");
35            System.out.println("3. Perbarui Unit");
36            System.out.println("4. Hapus Unit");
37            System.out.println("5. Kembali");
38            System.out.print("Pilih: ");
39            int pilihan = scanner.nextInt();
40            scanner.nextLine();
41
42            if (pilihan == 1) {
43                System.out.println("Pilih tipe unit:");
44                System.out.println("1. Excavator");
45                System.out.println("2. Bulldozer");
46                int tipe = scanner.nextInt();
47                scanner.nextLine();
48
49                System.out.print("Nama Unit: ");
50                String nama = scanner.nextLine();
51                System.out.print("Harga /Day: ");
52                double harga = scanner.nextDouble();
53                scanner.nextLine();
54
55                if (tipe == 1) {
56                    System.out.print("Kapasitas Bucket (m3): ");
57                    double kapasitas = scanner.nextDouble();
58                    daftarUnit.add(new Excavator(unitId++, nama, harga, true, kapasitas));
59                } else if (tipe == 2) {
60                    System.out.print("Tipe Blade: ");
61                    String blade = scanner.nextLine();
62                    daftarUnit.add(new Bulldozer(unitId++, nama, harga, true, blade));
63                } else {
64                    System.out.println("Tipe tidak valid!");
65                }
66            }
67
68            } else if (pilihan == 2) {
69                for (Unit unit : daftarUnit)
70                    System.out.println(unit.getId() + ". " + unit.getNama() + " - Rp " + unit.getHarga() + " /Day - " + (unit.isTersedia() ? "Ready" : "Rented") + " | " + unit.getInfo());
71
72            } else if (pilihan == 3) {
73                System.out.print("Masukkan ID unit yang akan diperbarui: ");
74                int id = scanner.nextInt();
75                scanner.nextLine();
76                for (Unit unit : daftarUnit) {
77                    if (unit.getId() == id) {
78                        System.out.print("Nama baru: ");
79                        unit.setNama(scanner.nextLine());
80                        System.out.print("Harga /Day: ");
81                        unit.setHarga(scanner.nextDouble());
82                        scanner.nextLine();
83
84                        if (unit instanceof Excavator) {
85                            Excavator ex = (Excavator) unit;
86                            System.out.print("Kapasitas Bucket baru (m3): ");
87                            ex.setKapasitas(scanner.nextDouble());
88                            scanner.nextLine();
89                        } else if (unit instanceof Bulldozer) {
90                            Bulldozer bd = (Bulldozer) unit;
91                            System.out.print("Tipe Blade baru: ");
92                            bd.setTipeBlade(scanner.nextLine());
93                        }
94
95                        System.out.println("Data unit berhasil diperbarui!");
96                        break;
97                    }
98                }
99            } else if (pilihan == 4) {
100                System.out.print("Masukkan ID unit: ");
101                int id = scanner.nextInt();
102                daftarUnit.removeIf(unit -> unit.getId() == id);
103            } else break;
104        }
105    }
106

```