**Large Class**

class person{

String name;

int empid;

int phno;

double salary;

void sal(){

------

------

}

void display(){

------

------

}

}

**Extract Class**

class person{

String name;

int empid;

int phno;

void display()

{

---

---

}

}

class sal

{

double salary;

void sale(){

---

---

}

}

**Long Method**

void display ()

{

empdetails();

System.out.println(“Name=”+name);

System.out.println(“EmpId=”+eid);

System.out.println(“Salary=”+sal);

System.out.println(“Address=”+add);

}

**Extract Method**

void display ()

{

empdetails();

System.out.println(“Name=”+name);

System.out.println(“EmpId=”+eid);

System.out.println(“Address=”+add);

}

void salary()

{

System.out.println(“Salary=”+sal);

}

**Magic Number**

public double getarea(double r)

{

return 3.14\*r\*r;

}

**Extract Constant**

public class circle

{

double PI = Math.PI;

double getArea(double r)

{

return PI = r\*r;

}

}

**Feature Envy**

class contact

{

public string country ()

{

return “India”;

}

public string state ()

{

return “Odisha”;

}

public string city ()

{

return “Cuttack”;

}

}

class user

{

int contactno:

user (contact cf)

{

cf1 = cf

}

public string getdetails (contact c)

{

String cou = c.country();

String st = c.state();

String ct = c.city();

return cou+”;”+st+”;”+ct;

}

}

**Move Method**

class contact

{

public string country ()

{

return “India”;

}

public string state ()

{

return “Odisha”;

}

public string city ()

{

return “Cuttack”;

}

public string getdetails (contact c)

{

String cou = c.country();

String st = c.state();

String ct = c.city();

return cou+”;”+st+”;”+ct;

}

}

class user

{

int contactno:

user (contact cf)

{

cf1 = cf

}

}

**Refused Bequest**

class government

{

double computerbasetask()

{

---

---

}

double personaltax()

{

---

---

}

public double gettax()

{

double tax = computerbasetask();

return personaltax();

}

}

**Replace Delegation with Inheritance**

class company extend government

{

double initialtax()

{

---

---

}

public double gettax()

{

double tax = initialtax();

return personaltax(tax);

}

}