```java
package com.suivi;
public class Patient {
    private int id;
    private String nom;
    private String prenom;
    private String date;
    private int tension;
    private int rythme;
    public Patient(int id, String nom, String prenom, String date, int tension,
            int rythme) {
        this.id = id;    this.nom = nom;     this.prenom = prenom;
        this.date = date;     this.tension = tension;     this.rythme = rythme;
    }
    public int getId() {  return id; }
    public String getNom() {  return nom;  }
    public String getPrenom() {  return prenom; }
    public String getDate() {  return date; }
    public int getTension() {     return tension;  }
    public int getRythme() {     return rythme; }
    @Override
    public String toString() {     return nom + "-" + prenom + "-" + date;     }
}
```

```java
package com.suivi;
// les import nécessaires
public class MainActivity extends Activity {
  private Spinner spPatient;
  private EditText edTension;
  private EditText edRythme;
  private Button btnActualiser;
  private Button btnNouveau;
  private ArrayAdapter<Patient> adpPatient;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      init();
  }
  private void init() {
      spPatient = (Spinner) findViewById(R.id.spPatient);
      edTension = (EditText) findViewById(R.id.edTension);
      edRythme = (EditText) findViewById(R.id.edRythme);
      btnActualiser = (Button) findViewById(R.id.btnModifier);
      btnNouveau = (Button) findViewById(R.id.btnNouveau);
      edRythme = (EditText) findViewById(R.id.edRythme);
      adpPatient = new ArrayAdapter<Patient>(this,
android.R.layout.simple_spinner_dropdown_item);
      spPatient.setAdapter(adpPatient);
      remplir();
      ajouterEcouteurs();
  }
  private void ajouterEcouteurs() {
      btnActualiser.setOnClickListener(new OnClickListener() {
          @Override
          public void onClick(View v) {
            modifier();
          }
      });
      btnNouveau.setOnClickListener(new OnClickListener() {

          @Override
          public void onClick(View v) {
            nouveau();
          }
      });
      spPatient.setOnItemSelectedListener(new OnItemSelectedListener() {
          @Override
          public void onItemSelected(AdapterView<?> arg0, View arg1, int arg2, long arg3) {
            actualiser();

          }
          @Override
          public void onNothingSelected(AdapterView<?> arg0) {      }
      });
  }
  private void remplir() {
      RequestQueue queue = Volley.newRequestQueue(this);
      String url = "http://100.20.12.2:80/gestion/suivi/Liste.php";
      JsonObjectRequest jsObjRequest = new JsonObjectRequest(Request.Method.POST, url, null,
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```java
            new Response.Listener<JSONObject>() {
                @Override
                public void onResponse(JSONObject response) {
                    try {
                        JSONArray a = response.getJSONArray("liste");
                        adpPatient.clear();
                        for (int i = 0; i < a.length(); i++) {
                            JSONObject o = a.getJSONObject(i);
                            int id = o.getInt("id");
                            String nom = o.getString("nom");
                            String prenom = o.getString("prenom");
                            String date = o.getString("date");
                            int tension = o.getInt("tension");
                            int rythme = o.getInt("rythme");
                            Patient p = new Patient(id, nom, prenom, date, tension, rythme);
                            adpPatient.add(l);
//2ème méthode
// adpPatient.add(new Patient (o.getInt("id"), o.getString("nom"), o.getString("prenom"),
// o.getString("date"), o.getInt("tension"), o.getInt("rythme")));

                        }
                    } catch (JSONException e) {
                        Toast t = Toast.makeText(Modification.this, "Problème d'analyse JSON: " +
e.getMessage(),
                                Toast.LENGTH_LONG);
                        t.show();
                    }
                }
            }, new Response.ErrorListener() {
                @Override
                public void onErrorResponse(VolleyError error) {
                    Toast t = Toast.makeText(Modification.this, "Problème d'appel HTTP: " +
error.getMessage(),
                                Toast.LENGTH_LONG);
                    t.show();
                }
            });
        queue.add(jsObjRequest);
    }
    }
    protected void actualiser() {
        Patient p = (Patient) spPatient.getSelectedItem();
        if (p != null) {
            edTension.setText(p.getTension() + "");
            edRythme.setText(p.getRythme() + "");
        }
    }
    protected void nouveau() {
        Intent i = new Intent(MainActivity.this, Ajout.class);
        startActivity(i);
    }
```

```java
protected void modifier() {
        if(spPatient.getSelectedItemPosition()>=0) {
          final Patient p= (Patient) spPatient.getSelectedItem();
          RequestQueue queue = Volley.newRequestQueue(this);
          String url = "http://100.20.12.2:80/gestion/suivi/Modification.php";
            StringRequest stringRequest = new StringRequest(Request.Method.POST, url,
                new Response.Listener<String>() {
                  @Override
                  public void onResponse(String response) {
                    try {
                        JSONObject r = new JSONObject(response);
                        String etat = r.getString("ETAT");
                        if (etat.equals("SUCCES")) {
                          remplir();
                        } else {
                          Toast t = Toast.makeText(Modification.this, "Echec de la modification",
Toast.LENGTH_LONG);
                          t.show();
                        }
                    } catch (JSONException error) {
                        Toast t = Toast.makeText(Modification.this, "Problème d'analyse JSON:"
+ error.getMessage(), Toast.LENGTH_LONG);
                        t.show();
                    }
                  }
                }, new Response.ErrorListener() {
              @Override
              public void onErrorResponse(VolleyError e) {
                  Toast t = Toast.makeText(Modification.this, "Problème d'appel HTTP:" +
e.getMessage(), Toast.LENGTH_LONG);
                  t.show();
              }
          }) {
  @Override
  public Map<String, String> getParams() throws AuthFailureError {
      HashMap<String, String> headers = new HashMap<String, String>();
      headers.put("id", p.getId() + "");
      headers.put("tension", edTension.getText().toString());
      headers.put("rythme", edRythme.getText().toString());
      return headers;
  }
    };
    queue.add(stringRequest);
    }
  }
}
```

```java
package com.suivi;
// les import nécessaires
public class Ajout extends Activity {
  private EditText edNom;
  private EditText edPrenom;
  private EditText edDate;
  private Button btnAjouter;
  private Button btnRetour;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      init();
  }
  private void init() {
      edNom = (EditText) findViewById(R.id.edNom);
      edPrenom = (EditText) findViewById(R.id.edPrenom);
      edDate = (EditText) findViewById(R.id.edDate);
      btnAjouter = (Button) findViewById(R.id.btnAjouter);
      btnRetour = (Button) findViewById(R.id.btnRetour);
      ajouterEcouteur();
  }
  private void ajouterEcouteur() {
      btnAjouter.setOnClickListener(new OnClickListener() {
          @Override
          public void onClick(View v) {
            ajouter();
          }
      });
      btnRetour.setOnClickListener(new OnClickListener() {
          @Override
          public void onClick(View v) {
            retour();
          }
      });
  }
  protected void retour() {
      Intent i = new Intent(Ajout.this, MainActivity.class);
      startActivity(i);
  }
  protected void ajouter() {
          RequestQueue queue = Volley.newRequestQueue(this);
          String url = "http://100.20.12.2:80/gestion/suivi/Ajout.php";
          StringRequest stringRequest = new StringRequest(Request.Method.POST, url,
              new Response.Listener<String>() {
                  @Override
                  public void onResponse(String response) {
                    try {
                        JSONObject r = new JSONObject(response);
                        String etat = r.getString("ETAT");
                        if (etat.equals("SUCCES")) {
                            edNom.setText("");
                            edPrenom.setText("");
                            edDate.setText("");
                            edNom.requestFocus();
                        } else {
```

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                    Toast t = Toast.makeText(Ajout.this, "Echec de l'ajout",
Toast.LENGTH_LONG);
                        t.show();
                    }
                } catch (JSONException error) {
                    Toast t = Toast.makeText(Ajout.this, "Problème d'analyse JSON: " +
error.getMessage(), Toast.LENGTH_LONG);
                    t.show();
                }
            }
        }, new Response.ErrorListener() {
        @Override
        public void onErrorResponse(VolleyError e) {
            Toast t = Toast.makeText(Ajout.this, "Problème d'appel HTTP: " + e.getMessage(),
Toast.LENGTH_LONG);
            t.show();
        }
    }) {
  @Override
  public Map<String, String> getParams() throws AuthFailureError {
      HashMap<String, String> headers = new HashMap<String, String>();
      headers.put("nom", edNom.getText().toString());
      headers.put("prenom", edPrenom.getText().toString());
      headers.put("date", edDate.getText().toString());
      return headers;
  }
};
queue.add(stringRequest);
}
}
}
```