DataClass

```
import com.google.gson.annotations.Expose
import com.google.gson.annotations.SerializedName

data class Employee(
    @Expose
    @SerializedName("emp_name") val emp_name:String,

    @Expose
    @SerializedName("emp_gender") val emp_gender:String,

    @Expose
    @SerializedName("emp_email") val emp_email:String,

    @Expose
    @SerializedName("emp_salary") val emp_salary:String
)
```

class EmployeeAdptor

```
package com.example.ass8mysql

import Employee
import android.content.Context
import android.content.Intent
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import androidx.recyclerview.widget.RecyclerView
import com.example.ass8mysql.databinding.EmpItemLayoutBinding

class EmployeeAdptor (val employList: ArrayList<Employee>?, val context:
Context): RecyclerView.Adapter<EmployeeAdptor.ViewHolder>(){
    class ViewHolder(view: View, val binding: EmpItemLayoutBinding):
RecyclerView.ViewHolder(view) {

    }

    override fun onCreateViewHolder(parent: ViewGroup, viewType: Int):
ViewHolder {
        val binding =
EmpItemLayoutBinding.inflate(LayoutInflater.from(parent.context), parent,
false)
        return ViewHolder(binding.root, binding)
    }

    override fun getItemCount(): Int {
        return employList!!.size
    }

    override fun onBindViewHolder(holder: ViewHolder, position: Int) {
        val binding = holder.binding
```

```
        binding.txtName.text = "Name: " + employList!![position].emp_name
        binding.txtGender.text = "Gender: " +
employList!![position].emp_gender
        binding.txtEmail.text = "Email: " +
employList!![position].emp_email.toString()
        binding.txtSalary.text = "Salary: " +
employList!![position].emp_salary.toString()
    }
}
```

EmployeeApi

```
package com.example.ass8mysql

import Employee
import retrofit2.http.*

interface EmployeeAPI {
    @GET("allemp")
    fun retrieveStudent(): retrofit2.Call<List<Employee>>

    @FormUrlEncoded
    @POST("addemp")
    fun insertStd(
        @Field("emp_name") emp_name: String,
        @Field("emp_gender") emp_gender:String,
        @Field("emp_email") emp_email: String,
        @Field("emp_salary") emp_salary: Int
    ): retrofit2.Call<Employee>

}
```

InsertActivity

```
package com.example.ass8mysql

import Employee
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Toast
import com.example.ass8mysql.databinding.ActivityInsertBinding
import retrofit2.Call
import retrofit2.Callback
import retrofit2.Response
import retrofit2.Retrofit
import retrofit2.converter.gson.GsonConverterFactory

class InsertActivity : AppCompatActivity() {
    private lateinit var bindingInsert : ActivityInsertBinding
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        bindingInsert = ActivityInsertBinding.inflate(layoutInflater)
        setContentView(bindingInsert.root)
        //Add Button
```

```kotlin
        bindingInsert.btnAdd.setOnClickListener{
            addEmployee()
        }

        //Reset Button
        bindingInsert.btnReset.setOnClickListener{
            resetEmployee()
        }
    }


    private fun addEmployee() {
        val api: EmployeeAPI = Retrofit.Builder()
            .baseUrl("http://10.0.2.2:3000/")
            .addConverterFactory(GsonConverterFactory.create())
            .build()
            .create(EmployeeAPI::class.java)

        // Use bindingInsert to access the radio buttons and get the selected
gender
        var gender = ""
        if (bindingInsert.male.isChecked) {
            gender = "Male"
        }
        if (bindingInsert.female.isChecked) {
            gender = "Female"
        }

        api.insertStd(
            bindingInsert.edtName.text.toString(),
            gender,
            bindingInsert.edtEmail.text.toString(),
            bindingInsert.edtSalary.text.toString().toInt()
        ).enqueue(object : Callback<Employee>{
            override fun onResponse(
                call : Call<Employee>,
                response: retrofit2.Response<Employee>
            ){
                if(response.isSuccessful()){
                    Toast.makeText(applicationContext,"Successfully
Inserted",
                        Toast.LENGTH_SHORT).show()
                    finish()
                }else{
                    Toast.makeText(applicationContext,"Inserted Failed",
                        Toast.LENGTH_SHORT).show()
                }
            }
            override fun onFailure(call : Call<Employee>, t:Throwable){
                Toast.makeText(
                    applicationContext, "Error onFailure " + t.message,
                    Toast.LENGTH_LONG).show()
            }
        })
    }
```

```
    private fun resetEmployee(){
        bindingInsert.edtName.text?.clear()
        bindingInsert.edtGender.clearCheck() // Use edtGender instead of
Gender
        bindingInsert.edtEmail.text?.clear()
        bindingInsert.edtSalary.text?.clear()
    }

}
```

MainActivity

```
package com.example.ass8mysql

import Employee
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Toast
import androidx.recyclerview.widget.DividerItemDecoration
import androidx.recyclerview.widget.LinearLayoutManager
import com.example.ass8mysql.databinding.ActivityMainBinding
import retrofit2.Call
import retrofit2.Callback
import retrofit2.Response
import retrofit2.Retrofit
import retrofit2.converter.gson.GsonConverterFactory

class MainActivity : AppCompatActivity() {
    private lateinit var binding: ActivityMainBinding
    var studentList = arrayListOf<Employee>()
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        binding = ActivityMainBinding.inflate(layoutInflater)
        setContentView(binding.root)

        binding.recyclerView.adapter = EmployeeAdptor(this.studentList,
applicationContext)
        binding.recyclerView.layoutManager =
LinearLayoutManager(applicationContext)
        binding.recyclerView.addItemDecoration(
            DividerItemDecoration(binding.recyclerView.getContext(),
DividerItemDecoration.VERTICAL)
        )

        binding.btnEmployee.setOnClickListener {
            val intent = Intent(applicationContext,
InsertActivity::class.java)
            startActivity(intent)
        }

    }

    override  fun onResume() {
```

```kotlin
        super.onResume()
        callStudentData()
    }

    private fun callStudentData() {
        studentList.clear();
        val serv: EmployeeAPI = Retrofit.Builder()
            .baseUrl("http://10.0.2.2:3000/")
            .addConverterFactory(GsonConverterFactory.create())
            .build()
            .create(EmployeeAPI::class.java)
        serv.retrieveStudent()
            .enqueue(object : Callback<List<Employee>> {
                override fun onResponse(
                    call: Call<List<Employee>>,
                    response: Response<List<Employee>>
                ) {
                    response.body()?.forEach {
studentList.add(Employee(it.emp_name,it.emp_gender,it.emp_email,it.emp_salary
))
                    }
                    binding.recyclerView.adapter =
EmployeeAdptor(studentList, applicationContext)
                    binding.txtList.text = "Student List : " +
studentList.size.toString()
                }

                override fun onFailure(call: Call<List<Employee>>, t:
Throwable) {
                    Toast.makeText(applicationContext,"Error onFailure "+
t.message, Toast.LENGTH_LONG).show()
                }
            })
    }
}
```

activity_insert.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="20dp">
    <ImageView android:id="@+id/imageView1"
        android:layout_width="150dp"
        android:layout_height="150dp"
        android:layout_marginLeft="100dp"
        android:src="@drawable/employee"/>
    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
```

```xml
        android:hint="Name"
        android:layout_marginTop="12dp">
    <com.google.android.material.textfield.TextInputEditText
            android:id="@+id/edtName"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="text"
            android:textSize="20sp"/>
</com.google.android.material.textfield.TextInputLayout>
<TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Gender"
        android:textSize="25sp"
        android:textStyle="bold"
        android:layout_marginTop="15dp"/>
<RadioGroup
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/edtGender">
    <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"
            android:layout_marginTop="5dp">
        <androidx.appcompat.widget.AppCompatRadioButton
                android:id="@+id/male"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Male"
                android:textSize="20sp"/>
        <androidx.appcompat.widget.AppCompatRadioButton
                android:id="@+id/female"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Female"
                android:textSize="20sp"/>
    </LinearLayout>
</RadioGroup>
<com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
        android:hint="E-mail"
        android:layout_marginTop="12dp">
    <com.google.android.material.textfield.TextInputEditText
            android:id="@+id/edtEmail"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="text"
            android:textSize="20sp"/>
</com.google.android.material.textfield.TextInputLayout>
<com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        style="@style/Widget.MaterialComponents.TextInputLayout.OutlinedBox"
        android:hint="Salary"
```

```xml
        android:layout_marginTop="12dp">
        <com.google.android.material.textfield.TextInputEditText
            android:id="@+id/edtSalary"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="number"
            android:textSize="20sp"/>
    </com.google.android.material.textfield.TextInputLayout>
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/btnAdd"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:background="#69F0AE"
        android:text="Add"
        android:textSize="20sp"
        android:textAllCaps="false"/>
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/btnReset"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:background="#F88484"
        android:text="Reset"
        android:textSize="20sp"
        android:textAllCaps="false"/>
</LinearLayout>
```

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="10dp"
    tools:context=".MainActivity">
    <TextView
        android:id="@+id/txtList"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Employee Information"
        android:textSize="25sp"
        android:textStyle="bold"
        android:textColor="#4e6cef"
        android:layout_marginTop="30dp"/>
    <androidx.appcompat.widget.AppCompatImageView
        android:id="@+id/btnEmployee"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@drawable/addemployee"
        android:padding="10dp"
        android:background="#fff176"
        android:layout_alignParentRight="true"/>
```

```xml
    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/recyclerView"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:scrollbars="vertical"
        android:layout_marginTop="6dp"
        android:layout_below="@id/btnEmployee"/>
</RelativeLayout>
```

Activity_item_layout.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical">
    <TextView
        android:id="@+id/txtName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Name :"
        android:textSize="20dp"
        android:textStyle="bold"
        android:layout_marginTop="15dp" />
    <TextView
        android:id="@+id/txtGender"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="20sp"
        android:layout_marginTop="7dp"
        android:text="Gender :"
        android:layout_below="@+id/txtName"/>
    <TextView
        android:id="@+id/txtEmail"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="20sp"
        android:layout_marginTop="7dp"
        android:text="Email :"
        android:layout_below="@+id/txtGender"/>
    <TextView
        android:id="@+id/txtSalary"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="20sp"
        android:layout_marginTop="7dp"
        android:text="Salary :"
        android:layout_below="@+id/txtEmail"/>
</LinearLayout>
```