For creating a new project:-
   New file -> activity -> new view …….

For variable creation for widgets
 Var xx= findviewbyid<type>(R.id.id of that widge)

For on click
btn.setOnClickListener()

    {

 }

To change the text of text vie
Used to show our result
 id.setText(e.toString())

To get text from date picker

Var a= (${datePicker.year}-${datePicker.month}-${datePicker.dayOfMonth}\n")

DatePicker Age Calculator

```
class MainActivity : AppCompatActivity() {
  @RequiresApi(Build.VERSION_CODES.O)
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main)
    var pickDateBtn = findViewById<Button>(R.id.datPicker)
    var selectedAge = findViewById<EditText>(R.id.age)
    fun calculateAge(date: Long): Int {
      val dob = Calendar.getInstance()
      dob.timeInMillis = date
      val today = Calendar.getInstance()
      return today.get(Calendar.YEAR) - dob.get(Calendar.YEAR)
    }
    val datePickerListener = DatePickerDialog.OnDateSetListener { _, year, month, day ->
      val calendar = Calendar.getInstance()
      calendar.set(Calendar.YEAR, year)
      calendar.set(Calendar.MONTH, month)
      calendar.set(Calendar.DAY_OF_MONTH, day)
```

```kotlin
            val dateFormat = SimpleDateFormat("dd MMM YYYY", Locale.ENGLISH)
            selectedAge.setText(calculateAge(calendar.timeInMillis).toString())
        }
        pickDateBtn.setOnClickListener {
            val c = Calendar.getInstance()
            val mYear = c.get(Calendar.YEAR)
            val mMonth = c.get(Calendar.MONTH)
            val mDay = c.get(Calendar.DAY_OF_MONTH)
            val dateDialog = DatePickerDialog(it.context, datePickerListener, mYear, mMonth, mDay)
            dateDialog.datePicker.maxDate = Date().time
            dateDialog.show()
        }


    }
}
```

Spinner

```xml
<Spinner
        android:id="@+id/states_spinner"

        android:layout_width="133dp"

        android:layout_height="36dp"

        android:layout_marginStart="244dp"

        android:layout_marginTop="248dp"

        android:text="State"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        tools:ignore="MissingConstraints" />
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources ignore="MissingConstraints">

    <string name="app_name">21pw39_01</string>

        <string-array name="States_array">

            <item>AndhraPradesh</item>

            <item>Chandigarh</item>

            <item>Delhi</item>

            <item>Karnataka</item>
```

```xml
            <item>Mumbai</item>

            <item>Tamilnadu</item>

        </string-array>


</resources>
```

Main file

```kotlin
val spinner: Spinner = findViewById(R.id.states_spinner)
ArrayAdapter.createFromResource(
        this,
        R.array.States_array,
        android.R.layout.simple_spinner_item
    ).also { adapter ->
        // Specify the layout to use when the list of choices appears.

adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item)
        // Apply the adapter to the spinner.
        spinner.adapter = adapter

    }
```

String builder

```kotlin
val selectedItem = spinner.selectedItem.toString()
        val data = StringBuilder()
        data.append("Name: ${name.text.toString()}\n")
        data.append("Password: ${pass.text.toString()}\n")
        data.append("Address: ${adrs.text.toString()}\n")
        data.append("Gender: ${if (m.isChecked) "Male" else "Female"}\n")
        data.append("Age: ${age.text.toString()}\n")
    data.append("Date of Birth: ${cal.year}-${cal.month}-${cal.dayOfMonth}\n")
        data.append("State: $selectedItem\n")
```

```
            Toast.makeText(this, data.toString(), Toast.LENGTH_LONG).show()

            testview.setText(data.toString())
```

To do addition

```
var a = input1.text

            var b = input2.text

            var c = a.toString().toInt()

            var d= b.toString().toInt()

            var e = c+d

            sumre.setText(e.toString())
```

INTENT

```
    intent = Intent(this, SecondActivity::class.java)

            var Name = fn.text.toString()

            var Name2= ln.text.toString()

            intent.putExtra("Firstname", "r i5ofr56")

            intent.putExtra("Lastname", ln.text.toString())


            startActivity(intent)














class SecondActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {
```

```kotlin
        super.onCreate(savedInstanceState)

        setContentView(R.layout.activity_second)

        val data:TextView = findViewById(R.id.textView6 )

        var fs1 = intent.getStringExtra("Firstname")

        var ls1= intent.getStringExtra("Lastname")

    data.setText(fs1)




    }
}
```