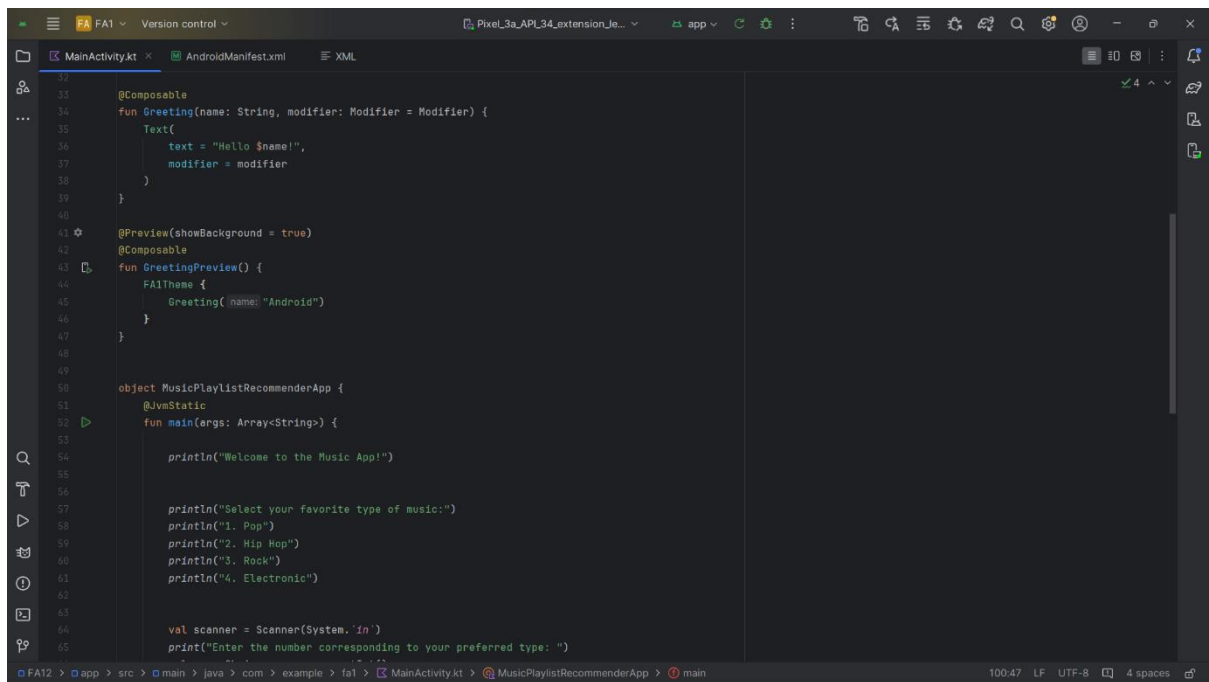


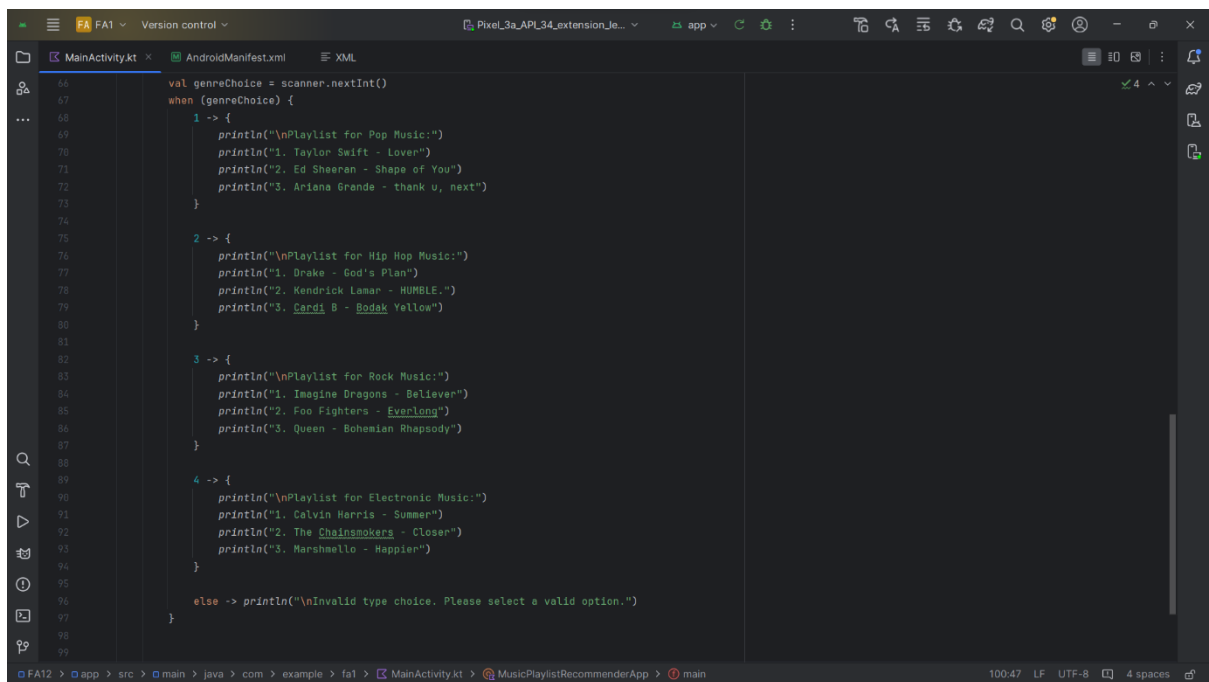
Tabish Parkar

Formative
Assessment 1:
Android App
Development
HASD200-1

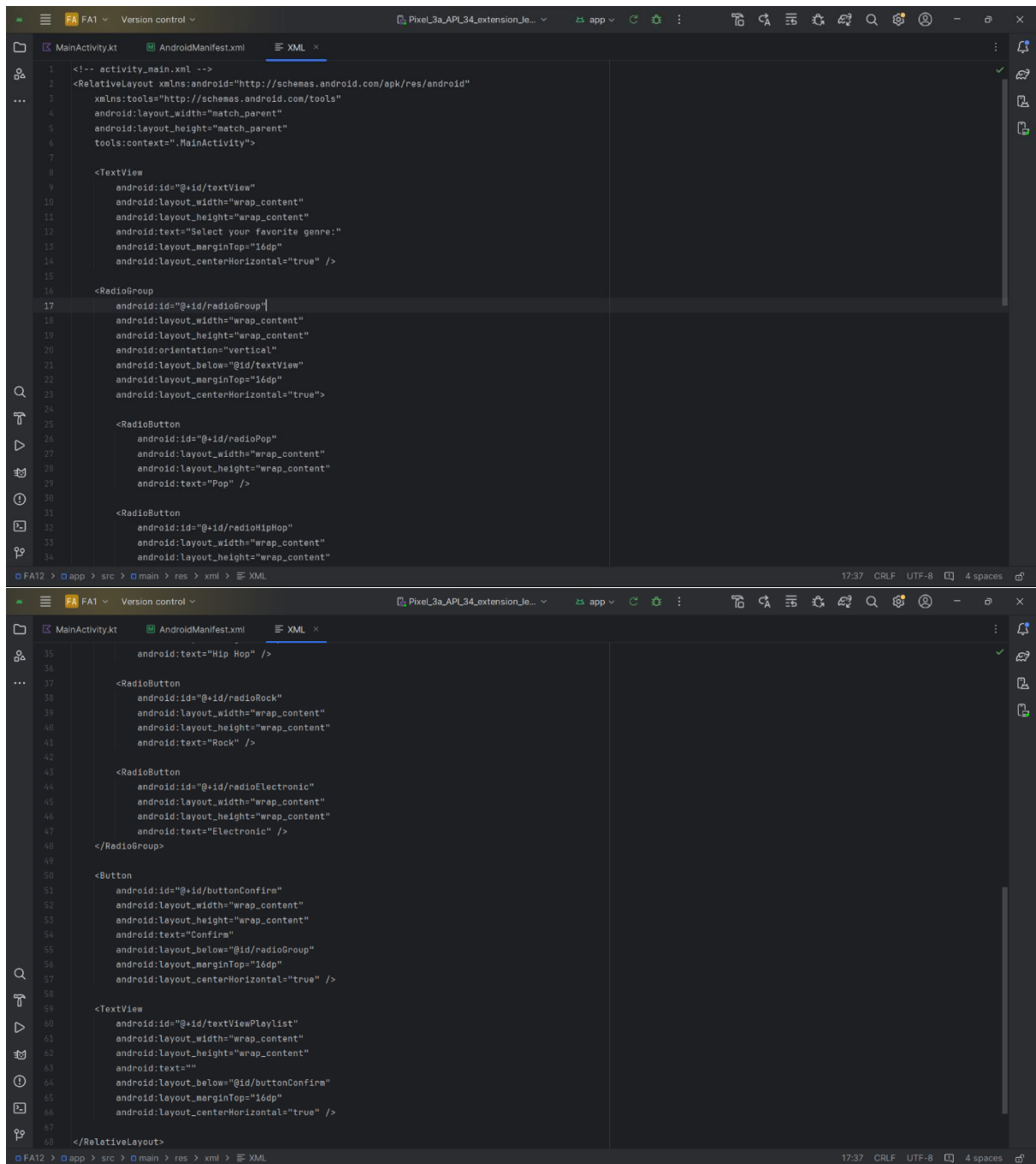
1.



```
32
33
34 @Composable
35 fun Greeting(name: String, modifier: Modifier = Modifier) {
36     Text(
37         text = "Hello $name!",
38         modifier = modifier
39     )
40 }
41
42 @Preview(showBackground = true)
43 @Composable
44 fun GreetingPreview() {
45     FA1Theme {
46         Greeting(name = "Android")
47     }
48 }
49
50 object MusicPlaylistRecommenderApp {
51     @JvmStatic
52     fun main(args: Array<String>) {
53
54         println("Welcome to the Music App!")
55
56
57         println("Select your favorite type of music:")
58         println("1. Pop")
59         println("2. Hip Hop")
60         println("3. Rock")
61         println("4. Electronic")
62
63
64         val scanner = Scanner(System.`in`)
65         print("Enter the number corresponding to your preferred type: ")
```



```
66 val genreChoice = scanner.nextInt()
67 when (genreChoice) {
68     1 -> {
69         println("\nPlaylist for Pop Music:")
70         println("1. Taylor Swift - Lover")
71         println("2. Ed Sheeran - Shape of You")
72         println("3. Ariana Grande - thank u, next")
73     }
74
75     2 -> {
76         println("\nPlaylist for Hip Hop Music:")
77         println("1. Drake - God's Plan")
78         println("2. Kendrick Lamar - HUMBLE.")
79         println("3. Cardi B - Bodak Yellow")
80     }
81
82     3 -> {
83         println("\nPlaylist for Rock Music:")
84         println("1. Imagine Dragons - Believer")
85         println("2. Foo Fighters - Everlong")
86         println("3. Queen - Bohemian Rhapsody")
87     }
88
89     4 -> {
90         println("\nPlaylist for Electronic Music:")
91         println("1. Calvin Harris - Summer")
92         println("2. The Chainsmokers - Closer")
93         println("3. Marshmello - Happier")
94     }
95
96     else -> println("\nInvalid type choice. Please select a valid option.")
97 }
98
99
```



```

1 public class MainActivity extends AppCompatActivity {
2     2 usages
3     private CheckBox checkBoxOption1, checkBoxOption2;
4     2 usages
5     private RadioButton radioButtonOption1, radioButtonOption2;
6     2 usages
7     private Button buttonEnter;
8     3 usages
9     private TextView textViewSelectedOptions;
10
11
12     no usages
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         checkBoxOption1 = findViewById(R.id.checkBoxOption1);
19         checkBoxOption2 = findViewById(R.id.checkBoxOption2);
20         radioButtonOption1 = findViewById(R.id.radioButtonOption1);
21         radioButtonOption2 = findViewById(R.id.radioButtonOption2);
22         buttonEnter = findViewById(R.id.buttonEnter);
23         textViewSelectedOptions = findViewById(R.id.textViewSelectedOptions);
24
25         buttonEnter.setOnClickListener(new View.OnClickListener() {
26             no usages
27             @Override
28             public void onClick(View v) {
29                 displaySelectedOptions();
30             }
31         });
32     }
33 }

```

```

34 private void displaySelectedOptions() {
35     StringBuilder selectedOptions = new StringBuilder();
36
37     if (checkBoxOption1.isChecked()) {
38         selectedOptions.append("CheckBox Option 1\n");
39     }
40
41     if (checkBoxOption2.isChecked()) {
42         selectedOptions.append("CheckBox Option 2\n");
43     }
44
45     if (radioButtonOption1.isChecked()) {
46         selectedOptions.append("RadioButton Option 1\n");
47     }
48
49     if (radioButtonOption2.isChecked()) {
50         selectedOptions.append("RadioButton Option 2\n");
51     }
52
53     if (selectedOptions.toString().isEmpty()) {
54         textViewSelectedOptions.setText("No options selected.");
55     } else {
56         textViewSelectedOptions.setText(selectedOptions.toString());
57     }
58 }
59
60 }

```

```
1 <!-- activity_main.xml -->
2 <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     android:layout_width="match_parent"
4     android:layout_height="match_parent">
5
6     <CheckBox
7         android:id="@+id/checkboxOption1"
8         android:layout_width="wrap_content"
9         android:layout_height="wrap_content"
10        android:layout_marginTop="16dp"
11        android:text="CheckBox Option 1" />
12
13     <CheckBox
14         android:id="@+id/checkboxOption2"
15         android:layout_width="wrap_content"
16         android:layout_height="wrap_content"
17         android:layout_below="@id/checkboxOption1"
18         android:layout_marginTop="97dp"
19         android:text="CheckBox Option 2" />
20
21     <RadioButton
22         android:id="@+id/radioButtonOption1"
23         android:layout_width="wrap_content"
24         android:layout_height="wrap_content"
25         android:layout_below="@id/checkboxOption2"
26         android:layout_marginTop="147dp"
27         android:text="RadioButton Option 1" />
28
29     <RadioButton
30         android:id="@+id/radioButtonOption2"
31         android:layout_width="wrap_content"
32         android:layout_height="wrap_content"
33         android:layout_below="@id/radioButtonOption1"
34         android:layout_marginTop="16dp"
35         android:layout_marginBottom="16dp"
36         android:layout_marginLeft="16dp"
37         android:layout_marginRight="16dp"
38         android:text="RadioButton Option 2" />
39
40     <Button
41         android:id="@+id/buttonEnter"
42         android:layout_width="wrap_content"
43         android:layout_height="wrap_content"
44         android:layout_below="@id/radioButtonOption2"
45         android:layout_marginTop="366dp"
46         android:text="Enter" />
47
48     <TextView
49         android:id="@+id/textViewSelectedOptions"
50         android:layout_width="wrap_content"
51         android:layout_height="wrap_content"
52         android:layout_below="@id/buttonEnter"
53         android:layout_marginTop="16dp"
54         android:layout_marginBottom="16dp"
55         android:layout_marginLeft="16dp"
56         android:layout_marginRight="16dp"
57         android:text="TextView Selected Options" />
58
59 </RelativeLayout>
```

3.

```
1  import android.R
2  import android.os.Bundle
3  import android.widget.Button
4  import android.widget.EditText
5  import android.widget.TextView
6
7
8  class MainActivity : AppCompatActivity() {
9      var editTextBase: EditText? = null
10     var editTextExponent: EditText? = null
11     var buttonCalculate: Button? = null
12     var textViewResult: TextView? = null
13     protected fun onCreate(savedInstanceState: Bundle?) {
14         super.onCreate(savedInstanceState)
15         setContentView(R.layout.activity_main)
16         editTextBase = findViewById(R.id.editTextBase)
17         editTextExponent = findViewById(R.id.editTextExponent)
18         buttonCalculate = findViewById(R.id.buttonCalculate)
19         textViewResult = findViewById(R.id.textViewResult)
20         buttonCalculate!!.setOnClickListener { it: View!
21             val base = editTextBase!!.getText().toString().toDouble()
22             val exponent = editTextExponent!!.getText().toString().toDouble()
23             val result: Double = base.pow(exponent)
24             textViewResult!!.text = "Result: $result"
25         }
26     }
27 }
```

```

1  <!-- activity_main.xml -->
2  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent">
5
6      <EditText
7          android:id="@+id/editTextBase"
8          android:layout_width="wrap_content"
9          android:layout_height="wrap_content"
10         android:inputType="numberDecimal"
11         android:hint="Enter base number"
12         android:layout_marginTop="16dp"/>
13
14     <EditText
15         android:id="@+id/editTextExponent"
16         android:layout_width="wrap_content"
17         android:layout_height="wrap_content"
18         android:inputType="numberDecimal"
19         android:hint="Enter exponent"
20         android:layout_below="@id/editTextBase"
21         android:layout_marginTop="8dp"/>
22
23     <Button
24         android:id="@+id/buttonCalculate"
25         android:layout_width="wrap_content"
26         android:layout_height="wrap_content"
27         android:text="Calculate"
28         android:layout_below="@id/editTextExponent"
29         android:layout_marginTop="16dp"/>
30
31     <TextView
32         android:id="@+id/textViewResult"
33         android:layout_width="wrap_content"
34         android:layout_width="wrap_content"
35         android:layout_height="wrap_content"
36         android:layout_below="@id/buttonCalculate"
37         android:layout_marginTop="16dp"/>
38 </RelativeLayout>

```