

**ASSIGNMENT-1**  
**STUDENTS PERFORMANCE PREDICTION**

**CODE :**

**Activity\_main.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">

    <EditText    android:id="@+id/etHours"

        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:autofillHints=""

        android:hint="Study hours per week" />

    <EditText

        android:id="@+id/etAttendance"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Attendance (%)" />

    <EditText

        android:id="@+id/etPrevMarks"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Previous Marks" />    <Button

        android:id="@+id/btnPredict"
        android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"  
    android:text="Predict Performance" />
```

```
    <TextView  
        android:id="@+id/tvResult"  
        android:layout_width="match_parent"  
        android:layout_height="wrap_content"  
        android:text="Result will appear here"  
        android:paddingTop="20dp" />  
  
</LinearLayout>
```

**MainActivity.kt :**

```
package com.example.a34_mad_assignment
```

```
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle import
android.widget.Button import
android.widget.EditText import
android.widget.TextView

private val String.predictMarks: Any
    get() {      val todo
    = TODO()
    }

class MainActivity : AppCompatActivity() {
    private lateinit var etHours: EditText  private
    lateinit var etAttendance: EditText  private
    lateinit var etPrevMarks: EditText  private
    lateinit var btnPredict: Button  private
    lateinit var tvResult: TextView

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        etHours = findViewById(R.id.etHours)
        etAttendance = findViewById(R.id.etAttendance)
        etPrevMarks = findViewById(R.id.etPrevMarks)
        btnPredict = findViewById(R.id.btnPredict)      tvResult
        = findViewById(R.id.tvResult)
        btnPredict.setOnClickListener {
            predictPerformance()
        }
    }
}
```

```
}

private fun predictPerformance() {    val hours =
etHours.text.toString().toDoubleOrNull()    val attendance =
etAttendance.text.toString().toDoubleOrNull()    val prevMarks =
etPrevMarks.text.toString().toDoubleOrNull()

if (hours == null || attendance == null || prevMarks == null) {
tvResult.text = "Please enter valid values!"

return
}

val predicted = "Predictor".predict(hours, attendance, prevMarks)
val grade = "Predictor".get("predicted")

val output = """
Predicted Marks: {"%.2f".format(predicted)}
Predicted Grade: grade
""".trimIndent()

tvResult.text = output
}

private fun String.get(string: String) {
}

private fun String.predict(hours: Double, attendance: Double, prevMarks: Double) {
return "Predictor".predict(hours, attendance, prevMarks)
}
```