



EXPERIMENT-5

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SEMESTER: 6TH

SUBJECT CODE: 20CSP356

SUBJECT NAME: MAD LAB

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AIM/OVERVIEW OF THE PRACTICAL:-

Create an Android App using various controls such as;

TextEdit.

CheckBox.

RadioButton.

RadioGroup.

OBJECTIVE:-

Create an Android App using CheckBox.

STEPS:

1. Create a New Project
2. Click on the new project then empty activity and specify the android version and language.
3. After the project has been created then write the code for creating the textbox to show the message.
4. Write code for the main activity and the xml file.
5. Select your device and run the code.
6. You can either run on virtual device or a physical device as according to your preference.



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CODE:-

XML:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#ffffff"
    android:orientation="vertical"
    tools:context=".MainActivity">
```

```
<TextView
    android:id="@+id/textView"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Choose your hobbies:"
    android:textSize="24sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<CheckBox
    android:id="@+id/checkbox"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Painting"
    android:layout_marginTop="16dp"
    android:textSize="18sp" />
```

```
<CheckBox
    android:id="@+id/checkbox2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Reading"
    android:layout_marginTop="16dp"
    android:textSize="18sp" />
```

```
<CheckBox
    android:id="@+id/checkbox3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:text="Singing"
    android:textSize="18sp"
```



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```
app:layout_constraintTop_toTopOf="@+id/textView"
tools:layout_editor_absoluteX="382dp" />
```

```
<CheckBox
android:id="@+id/checkBox4"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:text="Cooking"
android:layout_marginTop="16dp"
android:textSize="18sp"
app:layout_constraintTop_toBottomOf="@+id/checkBox"
tools:layout_editor_absoluteX="386dp" />
```

```
<Button
android:id="@+id/button"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginTop="16dp"
android:onClick="Check"
android:text="submit" />
</LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

MAINACTIVITY.JAVA

```
package com.example.exp5;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.CheckBox;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    CheckBox ch, ch1, ch2, ch3;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        // Binding MainActivity.java with activity_main.xml file
        setContentView(R.layout.activity_main);

        // Finding CheckBox by its unique ID
```



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```
ch=(CheckBox)findViewById(R.id.checkBox);
ch1=(CheckBox)findViewById(R.id.checkBox2);
ch2=(CheckBox)findViewById(R.id.checkBox3);
ch3=(CheckBox)findViewById(R.id.checkBox4);
}
// This function is invoked when the button is pressed.
public void Check(View v)
{
    String msg="";

    // Concatenation of the checked options in if

    // isChecked() is used to check whether
    // the CheckBox is in true state or not.

    if(ch.isChecked())
msg = msg + " Painting ";
    if(ch1.isChecked())
msg = msg + " Reading ";
    if(ch2.isChecked())
msg = msg + " Singing ";
    if(ch3.isChecked())
msg = msg + " Cooking ";

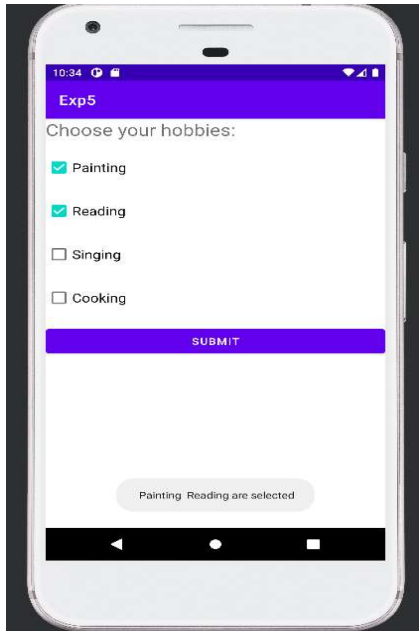
    // Toast is created to display the
    // message using show() method.
    Toast.makeText(this, msg + "are selected",
    Toast.LENGTH_LONG).show();
}
}
```



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OUTPUT:





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AIM:

Creating the Application Choosing Options Radio Button:

CODE:

MAINACTIVITY.JAVA

```
package com.example.exp5;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    // Define the object for Radio Group,
    // Submit and Clear buttons
    private RadioGroup radioGroup;
    Button submit, clear;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // Bind the components to their respective objects
        // by assigning their IDs
        // with the help of findViewById() method
        submit = (Button) findViewById(R.id.submit);
        clear = (Button) findViewById(R.id.clear);
        radioGroup = (RadioGroup) findViewById(R.id.groupradio);

        // Uncheck or reset the radio buttons initially
        radioGroup.clearCheck();

        // Add the Listener to the RadioGroup
        radioGroup.setOnCheckedChangeListener(
            new RadioGroup
                .OnCheckedChangeListener() {
                    @Override
```



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```
// The flow will come here when
// any of the radio buttons in the radioGroup
// has been clicked

// Check which radio button has been clicked
public void onCheckedChanged(RadioGroup group,
                             int checkedId) {

    // Get the selected Radio Button
    RadioButton
    radioButton
        = (RadioButton) group
        .findViewById(checkedId);
    }
});

// Add the Listener to the Submit Button
submit.setOnClickListener(new View.OnClickListener() {

    @Override
    public void onClick(View v) {

        // When submit button is clicked,
        // Get the Radio Button which is set
        // If no Radio Button is set, -1 will be returned
        int selectedId = radioGroup.getCheckedRadioButtonId();
        if (selectedId == -1) {
            Toast.makeText(MainActivity.this,
                           "No answer has been selected",
                           Toast.LENGTH_SHORT)
                .show();
        } else {

            RadioButton radioButton
                = (RadioButton) radioGroup
                .findViewById(selectedId);

            // Now display the value of selected item
            // by the Toast message
            Toast.makeText(MainActivity.this,
                           radioButton.getText(),
                           Toast.LENGTH_SHORT)
                .show();
        }
    }
});
```



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```
// Add the Listener to the Submit Button
clear.setOnClickListener(new View.OnClickListener() {

    @Override
    public void onClick(View v) {

        // Clear RadioGroup
        // i.e. reset all the Radio Buttons
        radioGroup.clearCheck();
    }
});
}
```

ACTIVITY MAIN.XML

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Select your Subject ?"
        android:textStyle="bold"
        android:layout_marginLeft="10dp"
        android:textSize="20sp"/>

    <RadioGroup
        android:layout_marginTop="50dp"
        android:id="@+id/groupradio"
        android:layout_marginLeft="10dp"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content">

        <RadioButton
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:id="@+id/radia_id1"
            android:text="DBMS"
            android:textSize="20sp"/>
    </RadioGroup>
</RelativeLayout>
```




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```
<RadioButton
android:layout_width="fill_parent"
android:layout_height="wrap_content"
android:id="@+id/radia_id2"
android:text="C/C++ Programming"
android:textSize="20sp"/>
```

```
<RadioButton
android:layout_width="fill_parent"
android:layout_height="wrap_content"
android:id="@+id/radia_id3"
android:text="Data Structure"
android:textSize="20sp"/>
```

```
<RadioButton
android:layout_width="fill_parent"
android:layout_height="wrap_content"
android:id="@+id/radia_id4"
android:text="Algorithms"
android:textSize="20sp"/>
</RadioGroup>
```

```
<Button
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Submit"
android:id="@+id/submit"
android:textStyle="bold"
android:textSize="20sp"
android:layout_marginTop="200dp"
android:layout_marginLeft="180dp"
/>
```

```
<Button
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Clear"
android:id="@+id/clear"
android:textSize="20sp"
android:textStyle="bold"
android:layout_marginTop="200dp"
android:layout_marginLeft="20dp"
/>
```

```
</RelativeLayout>
```



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OUTPUT:

