

DEPARTMENT OF

COMPUTED SCIENCE & ENGINEERING

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Experiment 2.2

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Section/Group: 905/A

Semester: 6th

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Subject Name: MAD LAB

Subject Code: 20CSP-356

1. **AIM:**

Create an Android App using various controls such as TextEdit, CheckBox, RadioButton, RadioGroup, etc.

2. **Objective:**

CheckBox belongs to android.widget.CheckBox class. Android CheckBox class is the subclass of CompoundButton class. It is generally used in a place where user can select one or more than choices from a given list of choices. For example, selecting hobbies.

3. **Steps/Program:**

Create an Android App using CheckBox.

CheckBox belongs to android.widget.CheckBox class. Android CheckBox class is the subclass of CompoundButton class. It is generally used in a place where user can select one or more than choices from a given list of choices. For example, selecting hobbies.

public class CheckBox extends CompoundButton

it has two states – checked or unchecked.

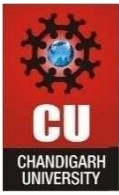
Methods of CheckBox class

- public boolean isChecked(): If CheckBox is in checked state then return true otherwise false.
- public void setChecked(boolean status): It changes the state of the CheckBox.

Below is the code for an example where the user chooses its hobbies from the given list containing Painting, Reading, Singing and Cooking with the help of CheckBox.

MainActivity.java

```
package com.example.exp5; import
androidx.appcompat.app.AppCompatActivity;
import android.view.View; import
android.os.Bundle; import android.widget.Button;
```



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```
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);
    setContentView(R.layout.activity_main);
//    finding checkbox ch=(CheckBox)findViewById(R.id.checkBox);

    ch1=(CheckBox)findViewById(R.id.checkBox2);
    ch2=(CheckBox)findViewById(R.id.checkBox3);
    ch3=(CheckBox)findViewById(R.id.checkBox4);

//    btn press
    Button btn = (Button) findViewById(R.id.button);

    btn.setOnClickListener( new
        View.OnClickListener() {
            @Override public void
            onClick(View v) { String
            msg=""; 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.makeText(getApplicationContext(), msg.toString() + "are selected",
            Toast.LENGTH_LONG).show();
        }
    }
};
}
```

}

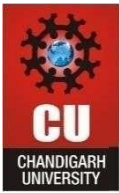
activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
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:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Select Hobbies"
    app:layout_constraintBottom_toTopOf="@+id/checkbox"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<CheckBox android:id="@+id/checkbox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp" android:text="Painting"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView"
    />
```

```
<CheckBox android:id="@+id/checkbox2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="8dp" android:text="Reading"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/checkbox"
    />
```



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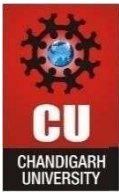
```
<CheckBox android:id="@+id/checkBox3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Singing" app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/checkBox2"
    app:layout_constraintVertical_bias="0.142" />
```

```
<CheckBox android:id="@+id/checkBox4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Cooking"
    app:layout_constraintBottom_toTopOf="@+id/button"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.501"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/checkBox3"
    app:layout_constraintVertical_bias="0.109" />
```

```
<Button android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="400dp"
    android:text="Submit"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.503"
    app:layout_constraintStart_toStartOf="parent" />
```

```
<RadioGroup android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/button"
    >
```

```
<RadioButton
    android:id="@+id/radioButton"
    android:layout_width="wrap_content"
```



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```
android:layout_height="wrap_content"  
android:text="text1" />
```

```
<RadioButton  
    android:id="@+id/radioButton1"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="text2" />
```

```
<RadioButton  
    android:id="@+id/radioButton2"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="text3" />
```

```
</RadioGroup>
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

Output:



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- ☐ DBMS
- ☒ C/C++ Programming
- ☐ Computer Network
- ☐ Algorithms

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