```
1 package com.example.assignment3;
 2
 3 import androidx.appcompat.app.AppCompatActivity;
4
 5 import android.content.Intent;
 6 import android.os.Bundle;
 7 import android.view.View;
8 import android.widget.Button;
9 import android.widget.Toast;
10
11 public class MainActivity extends AppCompatActivity implements View.OnClickListener {
12
       private Button
  btnCalculateGrade,btnCalculateVat,btnCalculateGpa,btnShowGallery,btnExit;
13
       @Override
       protected void onCreate(Bundle savedInstanceState) {
14
           super.onCreate(savedInstanceState);
15
           setContentView(R.layout.activity_main);
16
           btnCalculateGrade = (Button) findViewById(R.id.btnCalculateGrade);
17
           btnCalculateGrade.setOnClickListener(this);
18
19
           btnCalculateVat = (Button) findViewById(R.id.btnCalculateVat);
20
21
           btnCalculateVat.setOnClickListener(this);
22
23
           btnCalculateGpa = (Button) findViewById(R.id.btnCalculateGpa);
           btnCalculateGpa.setOnClickListener(this);
24
25
           btnShowGallery = (Button) findViewById(R.id.btnShowGallery);
26
           btnShowGallery.setOnClickListener(this);
27
28
           btnExit = (Button) findViewById(R.id.btnExit);
29
           btnExit.setOnClickListener(this);
30
31
       }
32
33
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60
61
       @Override
62
       public void onClick(View v) {
           int id = v.getId();
63
64
           if (id == R.id.btnCalculateGrade) {
65
               Toast.makeText(this, "Welcome page Calculate Grade",
66
  Toast.LENGTH_SHORT).show();
               Intent launchFirst = new Intent( this, GradeActivity.class);
67
               startActivity(launchFirst);
68
69
           }
           else if (id == R.id.btnCalculateVat)
70
71
               Toast.makeText(this, "Welcome page Calculate Vat",
72
  Toast.LENGTH SHORT).show();
               Intent launchSecond = new Intent( this, VatActivity.class);
73
74
               startActivity(launchSecond);
75
           }
           else if (id == R.id.btnCalculateGpa)
76
77
               Toast.makeText(this, "Welcome page Calculate Gpa",
78
  Toast.LENGTH SHORT).show();
79
               Intent launchTree = new Intent( this, GpaActivity.class);
               startActivity(launchTree);
80
81
           else if (id == R.id.btnShowGallery)
82
83
               Toast.makeText(this, "Welcome page Gallery", Toast.LENGTH_SHORT).show();
84
               Intent launchFour = new Intent(this, GalleryActivity.class);
85
               startActivity(launchFour);
86
87
           }
           else if (id == R.id.btnExit);
88
89
                 Toast.makeText(this, "Exit Main Program", Toast.LENGTH_SHORT).show();
90 //
                 finishAffinity();
91
92
93
           }
       }
94
95
96
97 }
```