|  |
| --- |
| package com.example.calculator; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| import androidx.appcompat.app.AppCompatActivity; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| import android.os.Bundle; |
|  |

|  |
| --- |
| import android.view.View; |
|  |

|  |
| --- |
| import android.widget.TextView; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| public class MainActivity extends AppCompatActivity { |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| TextView ip, op; |
|  |

|  |
| --- |
| double res = 0.0, num = 0.0; |
|  |

|  |
| --- |
| double fact = 1.0; |
|  |

|  |
| --- |
| char lstopr = '+'; |
|  |

|  |
| --- |
| double adj = 1; |
|  |

|  |
| --- |
| @Override |
|  |

|  |
| --- |
| protected void onCreate(Bundle savedInstanceState) { |
|  |

|  |
| --- |
| super.onCreate(savedInstanceState); |
|  |

|  |
| --- |
| setContentView(R.layout.activity\_main); |
|  |

|  |
| --- |
| ip = findViewById(R.id.txtIp); |
|  |

|  |
| --- |
| op = findViewById(R.id.txtOp); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| private void reset() { |
|  |

|  |
| --- |
| num = 0.0; |
|  |

|  |
| --- |
| fact = 1; |
|  |

|  |
| --- |
| adj = 1; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| private void nextPos() { |
|  |

|  |
| --- |
| if (fact < 1) fact /= 10.0; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnOne(View vi1) { |
|  |

|  |
| --- |
| ip.append("1"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10.0) + (fact \* 1); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnTwo(View vi2) { |
|  |

|  |
| --- |
| ip.append("2"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10.0) + (fact \* 2); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnThree(View vi3) { |
|  |

|  |
| --- |
| ip.append("3"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10.0) + (fact \* 3); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnFour(View vi4) { |
|  |

|  |
| --- |
| ip.append("4"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10.0) + (fact \* 4); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnFive(View vi5) { |
|  |

|  |
| --- |
| ip.append("5"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10) + (fact \* 5); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnSix(View vi6) { |
|  |

|  |
| --- |
| ip.append("6"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10) + (fact \* 6); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnSeven(View vi7) { |
|  |

|  |
| --- |
| ip.append("7"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10.0) + (fact \* 7); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnEight(View vi8) { |
|  |

|  |
| --- |
| ip.append("8"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10.0) + (fact \* 8); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnNine(View vi9) { |
|  |

|  |
| --- |
| ip.append("9"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10.0) + (fact \* 9); |
|  |

|  |
| --- |
| nextPos(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnZero(View vi0) { |
|  |

|  |
| --- |
| ip.append("0"); |
|  |

|  |
| --- |
| num = (num \* adj \* 10) + 0; |
|  |

|  |
| --- |
| if (fact < 1) fact /= 10.0; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnAdd(View viAdd) { |
|  |

|  |
| --- |
| System.out.println(lstopr); |
|  |

|  |
| --- |
| ip.append("+"); |
|  |

|  |
| --- |
| if (res == 0) { |
|  |

|  |
| --- |
| System.out.println("#"); |
|  |

|  |
| --- |
| res = num; |
|  |

|  |
| --- |
| lstopr = '+'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '+') { |
|  |

|  |
| --- |
| res += num; |
|  |

|  |
| --- |
| lstopr = '+'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '-') { |
|  |

|  |
| --- |
| res -= num; |
|  |

|  |
| --- |
| lstopr = '+'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == 'x') { |
|  |

|  |
| --- |
| lstopr = '+'; |
|  |

|  |
| --- |
| res \*= num; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '/') { |
|  |

|  |
| --- |
| lstopr = '+'; |
|  |

|  |
| --- |
| res /= num; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| reset(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnSub(View viSub) { |
|  |

|  |
| --- |
| ip.append("-"); |
|  |

|  |
| --- |
| if (res == 0) { |
|  |

|  |
| --- |
| res = num; |
|  |

|  |
| --- |
| lstopr = '-'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '+') { |
|  |

|  |
| --- |
| res += num; |
|  |

|  |
| --- |
| lstopr = '-'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '-') { |
|  |

|  |
| --- |
| res -= num; |
|  |

|  |
| --- |
| lstopr = '-'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == 'x') { |
|  |

|  |
| --- |
| lstopr = '-'; |
|  |

|  |
| --- |
| res \*= num; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '/') { |
|  |

|  |
| --- |
| lstopr = '-'; |
|  |

|  |
| --- |
| res /= num; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| reset(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnMul(View viMul) { |
|  |

|  |
| --- |
| ip.append("x"); |
|  |

|  |
| --- |
| if (res == 0) { |
|  |

|  |
| --- |
| lstopr = 'x'; |
|  |

|  |
| --- |
| res = num; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '+') { |
|  |

|  |
| --- |
| res += num; |
|  |

|  |
| --- |
| lstopr = 'x'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '-') { |
|  |

|  |
| --- |
| res -= num; |
|  |

|  |
| --- |
| lstopr = 'x'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == 'x') { |
|  |

|  |
| --- |
| lstopr = 'x'; |
|  |

|  |
| --- |
| res \*= num; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '/') { |
|  |

|  |
| --- |
| lstopr = 'x'; |
|  |

|  |
| --- |
| res /= num; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| reset(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnDiv(View viDel) { |
|  |

|  |
| --- |
| ip.append("/"); |
|  |

|  |
| --- |
| if (res == 0) { |
|  |

|  |
| --- |
| res = num; |
|  |

|  |
| --- |
| lstopr = '/'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '+') { |
|  |

|  |
| --- |
| res += num; |
|  |

|  |
| --- |
| lstopr = '/'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '-') { |
|  |

|  |
| --- |
| res -= num; |
|  |

|  |
| --- |
| lstopr = '/'; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == 'x') { |
|  |

|  |
| --- |
| lstopr = '/'; |
|  |

|  |
| --- |
| res \*= num; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '/') { |
|  |

|  |
| --- |
| lstopr = '/'; |
|  |

|  |
| --- |
| res /= num; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| reset(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnEq(View viEq) { |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| if (res == 0.0) op.setText(String.valueOf(num)); |
|  |

|  |
| --- |
| if (lstopr == '+') res += num; |
|  |

|  |
| --- |
| else if (lstopr == '-') res -= num; |
|  |

|  |
| --- |
| else if (lstopr == 'x') { |
|  |

|  |
| --- |
| res \*= num; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (lstopr == '/') res /= num; |
|  |

|  |
| --- |
| op.setText(String.valueOf(((long)((res \* 10000) + 0.5))/10000.0)); |
|  |

|  |
| --- |
| btnClr(viEq); |
|  |

|  |
| --- |
| res = 0.0; |
|  |

|  |
| --- |
| reset(); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnDec(View viDec) { |
|  |

|  |
| --- |
| if (fact < 0) return; |
|  |

|  |
| --- |
| fact = 0.1; |
|  |

|  |
| --- |
| adj = 0.1; |
|  |

|  |
| --- |
| ip.append("."); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void btnClr(View viClr) { |
|  |

|  |
| --- |
| reset(); |
|  |

|  |
| --- |
| res = 0; |
|  |

|  |
| --- |
| lstopr = '+'; |
|  |

|  |
| --- |
| ip.setText(null); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void Bs(View viBs) { |
|  |

|  |
| --- |
| res = 0; |
|  |

|  |
| --- |
| lstopr = '+'; |
|  |

|  |
| --- |
| reset(); |
|  |

|  |
| --- |
| op.setText(null); |
|  |

|  |
| --- |
| } |
|  |

}

tLayout>