

# Gramin Technical And Management Campus Nanded

---

## Department Of Computer Engineering

**Microproject : Prepare A Calculator Design Using An Applet.**

**Subject : Java Programming**

**Class : CO4i**

Sr. No	Name Of Students	Roll No.
1.	Khandre Avinash Balaji	2020COFSDSY466
2.	Jadhav Kiran Datta	2020COSSDSY421
3.	Dhadekar Akshay Vitthal	2020COFSDSY457

**Source Code :**

```
import java.applet.*;
```

```
import java.awt.*;
```

```
import java.awt.event.*;
```

```
public class Calculator extends Applet implements ActionListener
```

```
{
```

```
    String cmd[] = {"+", "-", "*", "/", "=", "C"};
```

```
    int pv = 0;
```

```
    String op = "";
```

```
    Button b[] = new Button[16];
```

```
    TextField t1 = new TextField(10);
```

```
public void init()
{
    setLayout(new BorderLayout());

    add(t1, "North");

    t1.setText("0");

    Panel p = new Panel();

    p.setLayout(new GridLayout(4, 4));

    for (int i = 0; i < 16; i++)
    {
        if (i < 10)

            b[i] = new Button(String.valueOf(i));

        else

            b[i] = new Button(cmd[i % 10]);

            b[i].setFont(new Font("Arial", Font.BOLD, 25));
    }
}
```

```
p.add(b[i]);
```

```
add(p, "Center");
```

```
b[i].addActionListener(this);
```

```
}
```

```
}
```

```
public void actionPerformed(ActionEvent ae)
```

```
{
```

```
    int res = 0;
```

```
    String cap = ae.getActionCommand();
```

```
    int cv = Integer.parseInt(t1.getText());
```

```
    if (cap.equals("C"))
```

```
    {
```

```
        t1.setText("0");
```

```
        pv = 0;
```

```
    cv = 0;  
  
    res = 0;  
  
    op = "";  
}
```

```
else if (cap.equals("="))
```

```
{
```

```
    res = 0;
```

```
    if (op == "+")
```

```
        res = pv + cv;
```

```
    else if (op == "-")
```

```
        res = pv - cv;
```

```
    else if (op == "*")
```

```
        res = pv * cv;
```

**else if (op == "/")**

**res = pv / cv;**

**t1.setText(String.valueOf(res));**

**}**

**else if (cap.equals("+") || cap.equals("-") || cap.equals("\*") ||  
cap.equals("/"))**

**{**

**pv = cv;**

**op = cap;**

**t1.setText("0");**

**}**

**else**

**{**

```
        int v = cv * 10 + Integer.parseInt(cap);

        t1.setText(String.valueOf(v));

    }

}

}

/*

<applet code="Calculator.class" width=401 height=391>

</applet>

*/
```

## Output :

```
C:\Users\HP\Desktop\cmd.exe - appletviewer Calculator.java
The system cannot find message text for message number 0x2350 in the message file for Application.
(c) Microsoft Corporation. All rights reserved.
C:\Program Files\Java\jdk1.7.0_80\bin>javac Calculator.java
C:\Program Files\Java\jdk1.7.0_80\bin>appletviewer Calculator.java
```

Applet			
0			
0	1	2	3
4	5	6	7
8	9	+	-
*	/	=	C

Applet started.