

**ASSINGMENT 02**

**GUI DESIGN TASK**

**EC 2010 - COMPUTER PROGRAMINNG**

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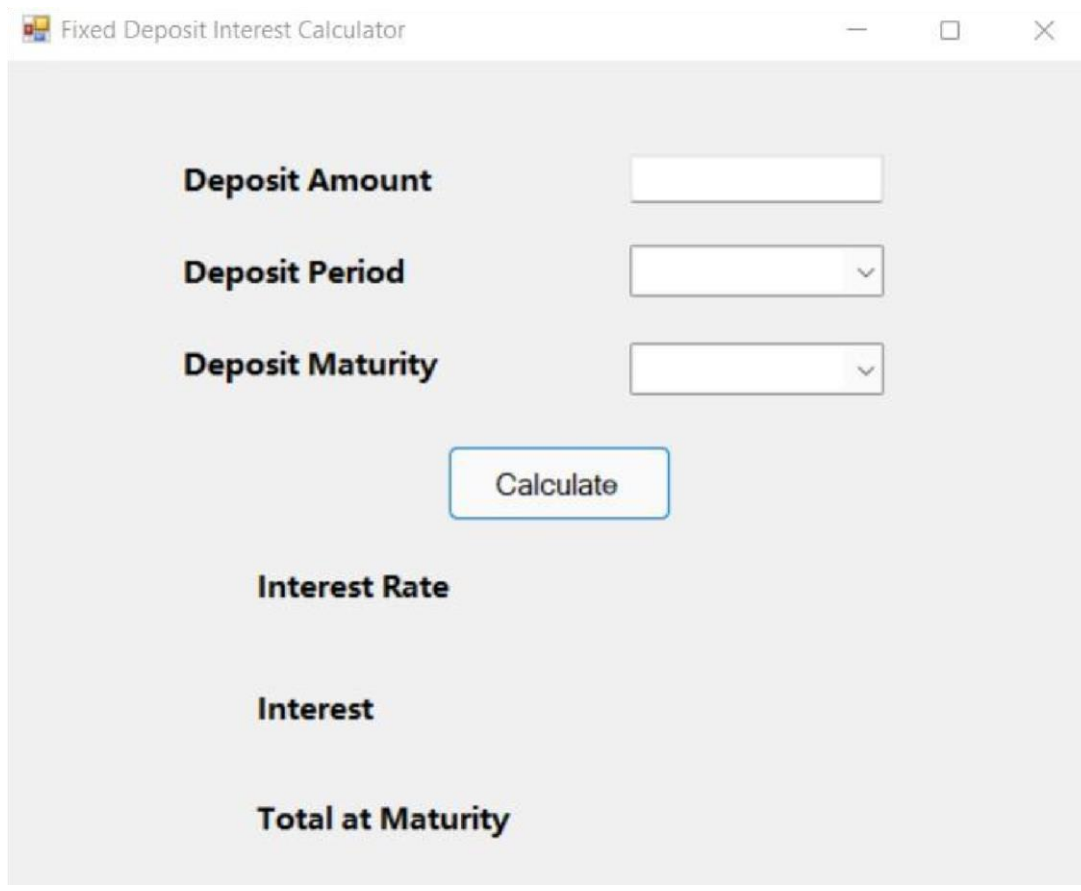
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GROUP A

SEMESTER 2

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## GUI SCREEN



A screenshot of a Java Swing window titled "Fixed Deposit Interest Calculator". The window has a light gray background and contains several labels, input fields, and a button. The labels "Deposit Amount", "Deposit Period", and "Deposit Maturity" are in bold black font. The "Deposit Amount" label is followed by a text input field. The "Deposit Period" and "Deposit Maturity" labels are followed by dropdown menu buttons. A "Calculate" button is centered below these inputs. At the bottom, there are three more labels: "Interest Rate", "Interest", and "Total at Maturity", all in bold black font. The window has standard OS window controls (minimize, maximize, close) in the top right corner.

Fixed Deposit Interest Calculator

**Deposit Amount**

**Deposit Period**

**Deposit Maturity**

**Interest Rate**

**Interest**

**Total at Maturity**

Fixed Deposit Interest Calculator

Deposit Amount

100000

Deposit Period

2

Deposit Maturity

Monthly

Calculate

Interest Rate

5.91 %

Interest Earned(Monthly)

492.5 LKR

Total at Maturity

100000 LKR

Fixed Deposit Interest Calculator

Deposit Amount

100000

Deposit Period

2

Deposit Maturity

Maturity

Calculate

Interest Rate

6.25 %

Interest Earned

12890.625 LKR

Total at Maturity

112890.625 LKR

## CODE FOR GUI TASK 02

```
private: double Maturity(int period, double deposit){
    double intrestRates[5] = { 5.5, 6.25, 7, 7.5, 8 };          int i = 0 ;
    double intrestRate = 0;
    while (true)
    {
        if (i == period) {                intrestRate =
intrestRates[i];                          break;
        }
        ++i;
    }
    double powerValue = 1;    for (int i = 0; i <=
period; ++i)
    {
        powerValue *= ((intrestRate / 100)+1);
    }
    double compoundInterest = deposit * (powerValue - 1);      return
compoundInterest;
}
private: double Monthly(int period, double deposit) {    double intrestRates[5] = {5.4,
5.91, 6.37,6.58, 6.75};    double compoundInterest = 0;
    for (int i = 1; i <= period; ++i)
    {
        if (i == period) {
            compoundInterest = (intrestRates[i] / 100) * deposit;
            break;
        }
    }
    return compoundInterest/12;
}
private: void Function(int period, double deposit, int maturity) {    double intrestRatesMaturity[5] = { 5.5,
6.25, 7, 7.5, 8 };
    double intrestRatesMonthly[5] = { 5.4, 5.91, 6.37,6.58, 6.75 };    switch (maturity)
    {
        case 0:
            this->label5->Text = "Interest Earned(Monthly)";
            this->label7->Text = Convert::ToString(intrestRatesMonthly[period] + "
%");
            this->label8->Text = Convert::ToString(Monthly(period, deposit) + "
LKR");
            this->label9->Text = Convert::ToString(deposit + " LKR");
            break;
        case 1:
            this->label5->Text = "Interest Earned";
            this->label7->Text = Convert::ToString(intrestRatesMaturity[period] + "
%");
    }
```

```

        this->label8->Text = Convert::ToString(Maturity(period, deposit) + "
LKR");
        this->label9->Text = Convert::ToString(deposit + Maturity(period,
deposit) + " LKR");
        break;
    }
}
private: System::Void button1_Click(System::Object^ sender, System::EventArgs^ e) {
    String^ Deposit = this->textBox1->Text; double deposit = Convert::ToDouble(Deposit);
    int period = this->comboBox1->SelectedIndex;
    int maturity = this->comboBox2->SelectedIndex;
    Function(period, deposit, maturity);
}

```