CostOfCollegeEducation.cpp

User manual

Program: CostOfCollegeEducation.cpp

- This programs calculates the cost of college education and prints the amount to pay for college education each year and also the total cost of education over the period of 5 year.
- To run the program double click on the file CostOfCollegeEducation.exe. A console window will appear asking you to enter the cost of attending college for the first year. Type the cost of attending college for the first year (without $ sign) and press enter.
- After that you will be asked to enter the rate of change of tuition per year. Enter the rate of change of tuition per year and press enter.
- After pressing the enter key, the program will display cost of attending college each year for the period of next 5 years and also the total cost of attending college.
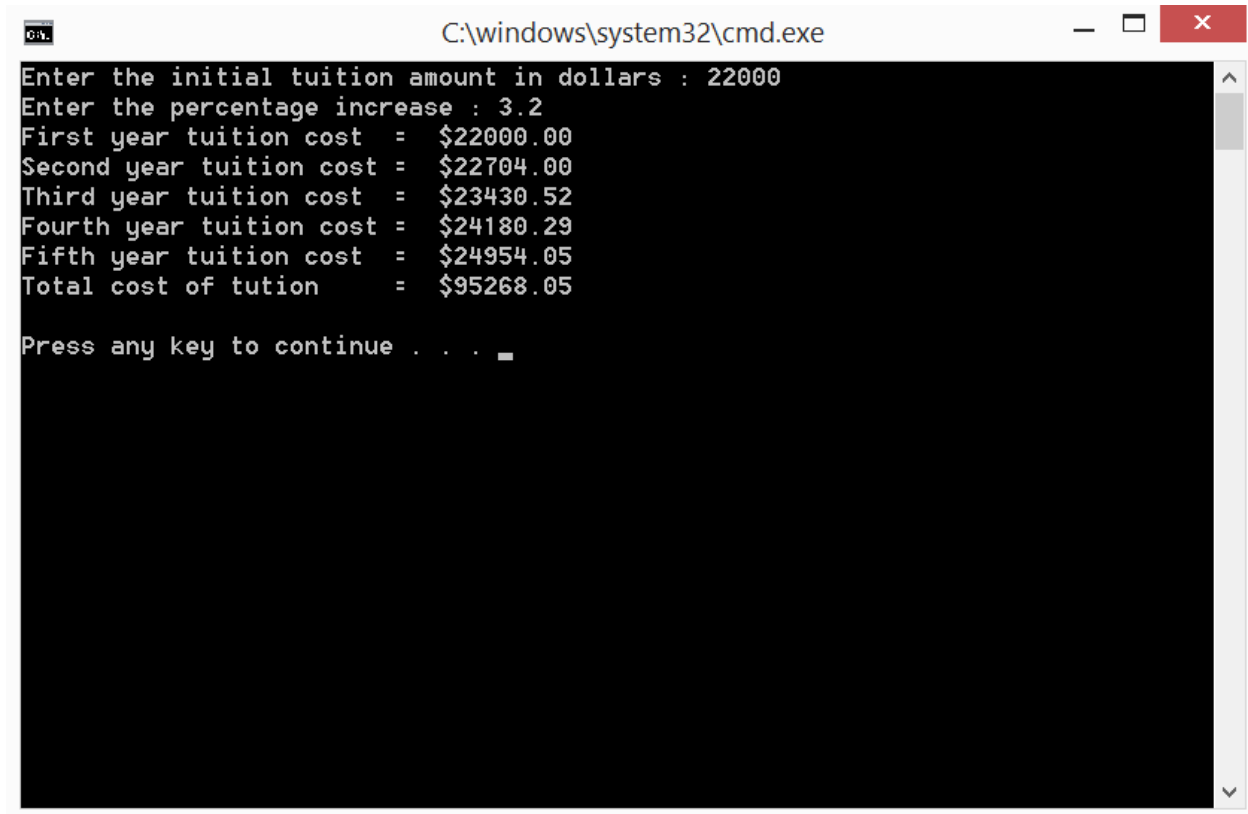
System Manual

Program: CostOfCollegeEducation.cpp

- This program calculates the cost of attending college each year, over the period of 5 year. It also calculates the total cost of attending college over the period of 5 years.
- This program first ask user to enter tuition cost for first year. This tuition cost is then stored in the variable named "tuition. This variable is of long int data type which is enough to store the cost of tuition.
- The program then ask user to enter the rate of change of tuition per year. This rate is stored in the variable named "rate". This variable is of double data type so that the number after decimal are not lost.
- Note : the rate is entered in percentage form. So it is necessary to change it to actual rate. The value of rate is changed using the formula:

  rate = (rate/100) +1
- Tuition for each year is calculate using the formula below. Since the value of tuition changes for each year. It is printed right after tuition is calculated

  tuition=tuition*rate
- Every time tuition for new year is calculated, it is also added to the variable total_tuition using the expression :

  total_tuition = total_tuition + tuition.

Test Logs

Program: CostOfCollegeEducation.cpp

```
Enter the initial tuition amount in dollars : 22000
Enter the percentage increase : 3.2
First year tuition cost  =  $22000.00
Second year tuition cost =  $22704.00
Third year tuition cost  =  $23430.52
Fourth year tuition cost =  $24180.29
Fifth year tuition cost  =  $24954.05
Total cost of tution     =  $95268.05

Press any key to continue . . . _
```