

Gaddis_8thEd_Chap6_Prob10_Future Value_Flowchart

File: main.cpp
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 Purpose: Future Value

System Libraries
 #include <iostream>
 #include <cmath>

User Libraries
 None

Global Constants
 None

Function Prototypes
 float futureValue(float P,
 float i, int t)

main

Declare variables
 float P, i;
 int t;

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Input data
 cout<<"Present value: ";
 cin>>P; cout<<"Monthly
 interest Rate: "; cin>>i;
 cout<<"the number of
 months: cin>>t;

cout<<"the account's
 future value is \$"
 <<futureValue(P,i,t)
 <<".\n"

return

futureValue(float P,
 float i, int t)

float F

$F = P * \text{pow}((1+i), t)$

return F