

Future Worth (Loop)

An amount of money P is invested in an account where interest is compounded annually. The future worth F yielded at an interest rate i after n years may be determined from the following formula:

$$F = P(1 + i)^n$$

Using a `for loop`, write a *function m-file* which calculates the future worth of an investment for each year from 1 through n . The function definition is:

```
function F = futureworth_loop(P,i,n,plotStatus)
```

Present worth P , interest rate i , number of periods n are inputs along with *plotStatus*, which toggles a plot of F over the years on or off. The future worth F is the output.

