Script Files
Accumulated Interest

Given an amount of principal P in an interest-bearing account that pays an interest rate of r that is compounded n times per year for t years. The accumulated amount of money in the account is given by the formula

$$A = P \left(1 + \frac{r}{n}\right)^{nt}.$$

Write the **R** script file `interest.r` that prompts the user for these values and prints the accumulated amount.

Here are several examples.

```
> source('~/Documents/R Folder/interest.r')
Please enter the principal  1000
Please enter the interest rate  0.06
Please enter the number of compounding periods per year  12
Please enter the number of years  10
The total amount accumulated is  1819.397

> source('~/Documents/R Folder/interest.r')
Please enter the principal  50000
Please enter the interest rate  0.03
Please enter the number of compounding periods per year  4
Please enter the number of years  20
The total amount accumulated is  90902.2
```