PSC205A Assignment 01: Matrix Algebra

Q1 Compute A + B

```r
A <- matrix(
  c(1,    4,    2,
    2,    0,   -5,
   -1,    2,    1,
    0,    1,    2
), nrow = 3, ncol=4)

B <- matrix(
  c(3, 1, 2,
   -4, 5, -1,
    1, 0, 3,
    2, 3, -1), nrow=3, ncol=4
)

A + B
```

```
     [,1] [,2] [,3] [,4]
[1,]    4   -2    0    2
[2,]    5    5    2    4
[3,]    4   -6    4    1
```

$$A + B = \begin{bmatrix} 1 & 2 & -1 & 0 \\ 4 & 0 & 2 & 1 \\ 2 & -5 & 1 & 2 \end{bmatrix} + \begin{bmatrix} 3 & -4 & 1 & 2 \\ 1 & 5 & 0 & 3 \\ 2 & -1 & 3 & -1 \end{bmatrix} = \begin{bmatrix} 4 & -2 & 0 & 2 \\ 5 & 5 & 2 & 4 \\ 4 & -6 & 4 & 1 \end{bmatrix}$$