

## Matrix

+ r : double\*\*  
+ rowCount: int  
+ colomnCount: int

+ Matrix()  
+ Matrix(int n)  
+ Matrix(int row, int column)  
+ Matrix(double \*)  
+ Matrix(const Matrix& m)  
+ ~Matrix()  
  
+ setValue(int r, int c, double value): void  
+ getValue(int r, int c): double  
+ clear(): void  
+ getRowCount(): int  
+ getColumnCount(): int  
+ printMatrix(): void  
+ showRank(): void  
+ getSMatrix(): void  
+ getQMatrix(): void  
+ getRank(): void  
  
+ operator=(const Matrix&): Matrix  
+ &operator\*=(const Matrix& m): Matrix  
+ &operator+=(const Matrix& m): Matrix  
+ &operator-=(const Matrix& m): Matrix  
+ operator\*(const Matrix&)const: Matrix  
+ operator+(const Matrix&)const: Matrix  
+ operator-(const Matrix&)const: Matrix  
+ operator++(int ): Matrix  
+ operator++(): Matrix  
+ operator--(int ): Matrix  
+ operator--(): Matrix  
+ operator==(const Matrix&): bool  
+ operator!=(const Matrix&): bool