Q1:
A. Write a program to find the value of $y$ from the following equations by using Arithmetic IF Statement:

\[ y = 3z! + e^z \quad \text{if } z < 0 \]
\[ y = z + \sum_{i=1}^{n} xi \quad \text{if } z = 0 \]
\[ y = z^2 + \sqrt{25z} \quad \text{if } z > 0 \]

Q2: Write a program to find and print the value of $s$ from the following:

\[ s = 4 + \frac{A! \times B!}{3 \times X^4} + \frac{A! \times B!}{6 \times X^8} + \frac{A! \times B!}{9 \times X^{12}} + \ldots \ldots \]

Q3: Write a program to read matrices $[A]_{n \times m}$ and $[B]_{n \times m}$, then find matrix $[C]$ and print it in file called 'out.dat', where

\[ [C] = [A] + [B] \]

Q4: Write a program to read $[A]_{n \times m}$, $[B]_{n \times m}$, and $[C]_{n \times n}$ from file called 'input.txt' and by using the subroutine technique, then find matrix $[D]$, where

\[ [D] = \text{mean of matrix } [A]^* \text{ mean of matrix } [B]^* [C] \]

Q5: Write a program to read matrix $[Z]_{a \times b}$, then find and print matrices $[C]$ and $[D]$, where

$[C]$ Contains the positive numbers of matrix $[Z]$
$[D]$ Contains the negative numbers of matrix $[Z]$

Q6: Run the following program

DIMENSION A(100,100)
A(1,1) = 1
A(1,2) = 3
A(1,3) = 3
A(2,1) = 2
A(2,2) = 2
A(2,3) = 3