

Shared memory unit is a zone in the vector memory for storing data to which access can be arranged with different software units. Shared memory unit has no internal borders, it is not divided into any structural elements. The data are in it - anonymous and do not have names. Any program unit that has access to a shared memory block to decide which way to interpret them.

For joint blocks of memory used by the operator COMMON. It is located in program units to the first operator who performed or after operators ads data types.

The program is only one common memory block can not be named. This unit has a name - neymynovanyy. If more than one block, their identification is their names. Taks blocks are called -imenovani.

Example. Neymenovanyy form a common unit for the variables X1, X2, Y1, Y2, and ymenovanyy common for the array block BL D (30, 40)

```
DIMENSION D (30, 40)
```

```
COMMON X1, X2, Y1, Y2
```

```
COMMON / BL / D
```

The joint unit creates and software unit, which first applied the relevant operator COMMON. Any other program units can access it, and only the beginning. If access is granted, the programming unit can, if necessary, increase size but decrease the size of the common block is impossible.

The variables included in the common block can not be initiated by using the DATA. Block can contain odors data types. Text data should be placed at the end of the block.

Example. Different types of data in a common unit.

```
DIMENSION T1 (87)
```

```
CHARACTER (30) A
```

```
COMMON T1, A
```

The length of the common memory block is the sum of the lengths of all its components. For example, what was considered calculate the length of the joint unit.
 $(87 \times 4B + 30V) = 378V$

Example. Implement data FN function through a common storage unit in the above calculation program displacement U (m) rotating disk.

```
PROGRAM WH1
```

```
INTEGER H
```

```
REAL MU
```

```
COMMON MU, GAM, W, H, G, E
```

```
DATA R1 / .05 /, R2 / .1`3 /
```

```
DATA W1, W2, DW / 50., 150., 10. /
```

```
MU = .3; GAM = 7.7E4; H = 2; G = 9.8; E = 2.1E11
```

```
WRITE (*, *) '***** INPUT DATA *****'
```

```
WRITE (*, *) 'R1 =', R1, 'R2 =', R2
```

```
WRITE (*, *) 'E =', E, 'G =', G
```

```
WRITE (*, *) 'GAM =', GAM, 'H =', H, 'MU =', MU
```

```
WRITE (*, *) '***** SOLVED NEXT *****'
```

```
WRITE (*, *) 'W (rad / c) U (m)'
```

```
DO W = W1, W2, DW
```

```
U = FN () * R2 / 8 * ((3 + MU) / (1-MU) * (R1 ** H + R2 ** H) + (3 + MU) / (1-MU) * (R1 ** H-R2 ** H)) WRITE (*, *) W, U ENDDO STOP
```

CONTAINS

FUNCTION FN ()

COMMON X1, X2, X3, X4, X5, X6

FN = (1-X1 ** X4) * X2 * X3 ** X4 / X6 / X6

END FUNCTION FN

END

Because the data in a common block anonymous, have no names, then matching data types or interpreting them in, order placement and order access to them is not liable compiler and software development.