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Assignment - 4

① The Symbol table has the following information about identifiers:-

- i) Name
- ii) Data type
- iii) Block level
- iv) Scope (global, local, parameter or temporary)
- v) offset from the base pointer
- vi) initial value (for global and local variables),
default value (for parameter)
- vii) others (depending on the context)

②

TAC	op	arg1	arg2	result
$t_{10} = j + 2$	+	j	2	t_{10}
$j = t_{10}$	=	t_{10}	null	j
$t_6 = j * 4$	*	j	4	t_6
$t_1 = \text{mem}[t_6]$	= []	mem	t_6	t_1
if $t_1 < \text{arg}$ goto G_1	<	t_1	arg	G_1

③

Columns:

Name	Type	Datatype	Size
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Global Symbol Table

x	var	int	4
f	function	int → void	0
g	function	int → int	0

f Symbol Table

m	parameter	int	4
x	var	float	4
y	var	float	4

g Symbol Table

u	parameter	int	4
t	var	bool	1

j	var	int	4
i	var	int	4

x	var	int	4
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