# cs3821 Assignment 2

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## 1 Question 4 (I)

#### 1.1 Table

Variable	Degree
a	7
b	7
$^{\mathrm{c}}$	7
d	7
e	7
$\mathbf{f}$	7
g	7
h	7
r	7
$\mathbf{s}$	7
t	7
u	7

### 1.2 Simple Register Allocation

The most simple allocation is that every variable is allocated to a single register.

#### 1.3 Efficient Register Allocation

An efficient allocation would be to allocate each register as it is being used and free them when once computation is completed. Although this would use as little registers as possible, the computation may take longer if we use the same variable multiple times.