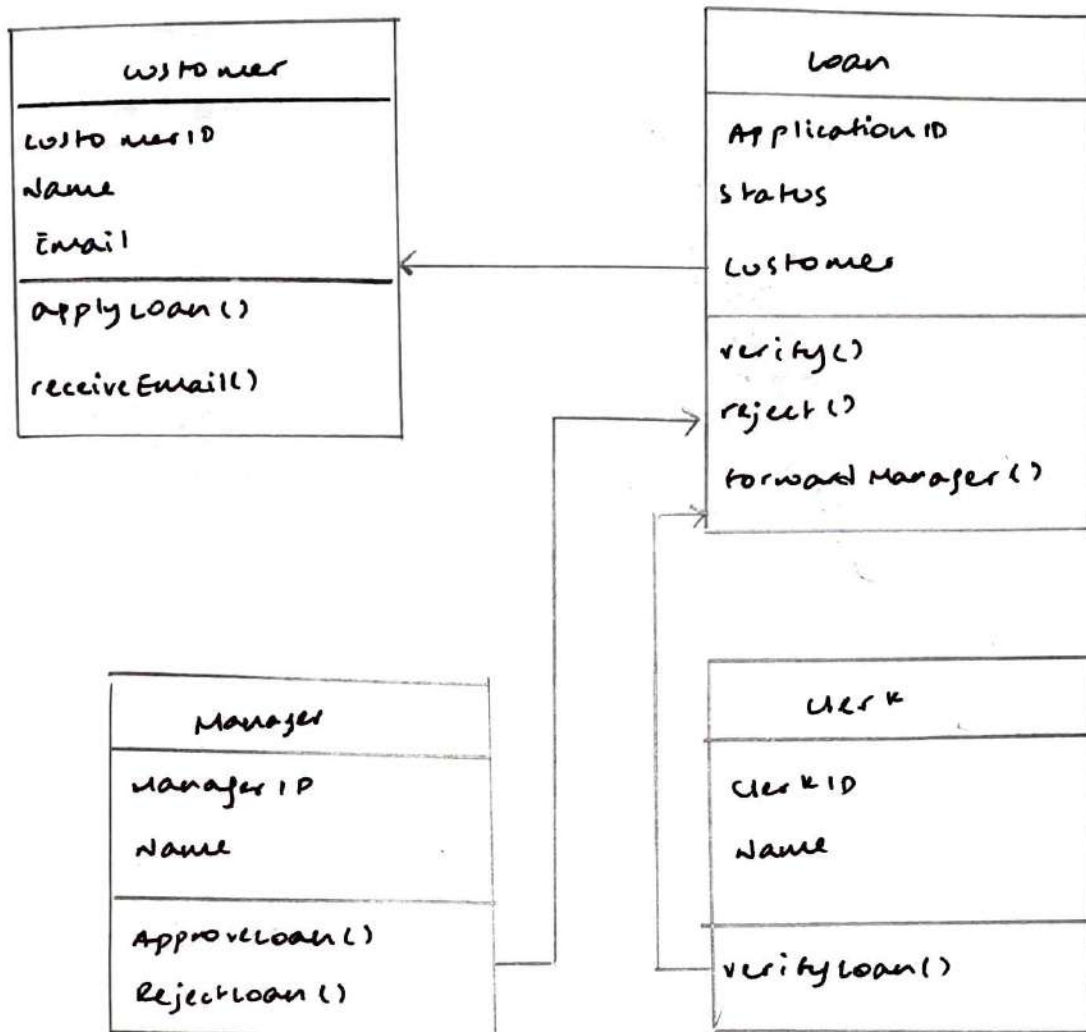


Question 1

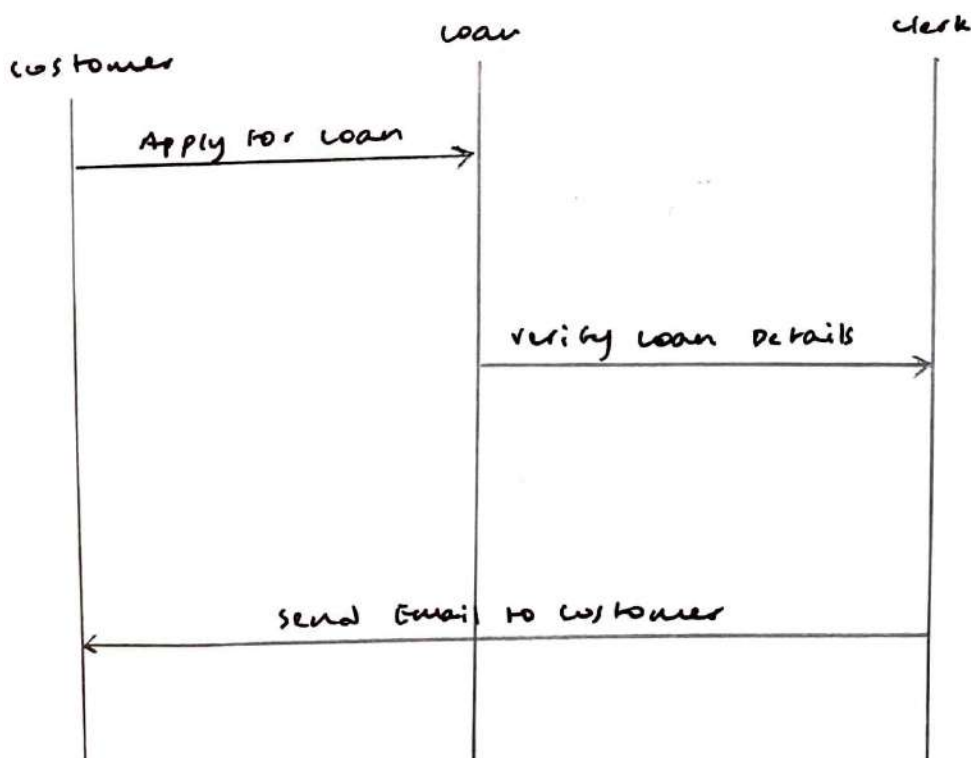
Ashwin Pinesh Srivatsa

21BDS0340

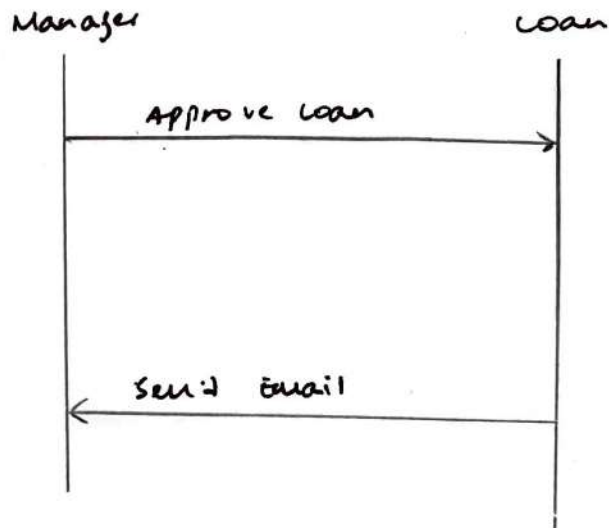
a.



b. i.



ii.



Question 2

```
#include <stdio.h>
```

```
int main() {
```

```
    int marks;
```

```
    scanf("%d", &marks);
```

```
    if (marks >= 0 && marks < 40)
```

```
        printf("F");
```

```
    else if (marks >= 40 && marks < 60)
```

```
        printf("C");
```

```
    else if (marks >= 60 && marks < 80)
```

```
        printf("B");
```

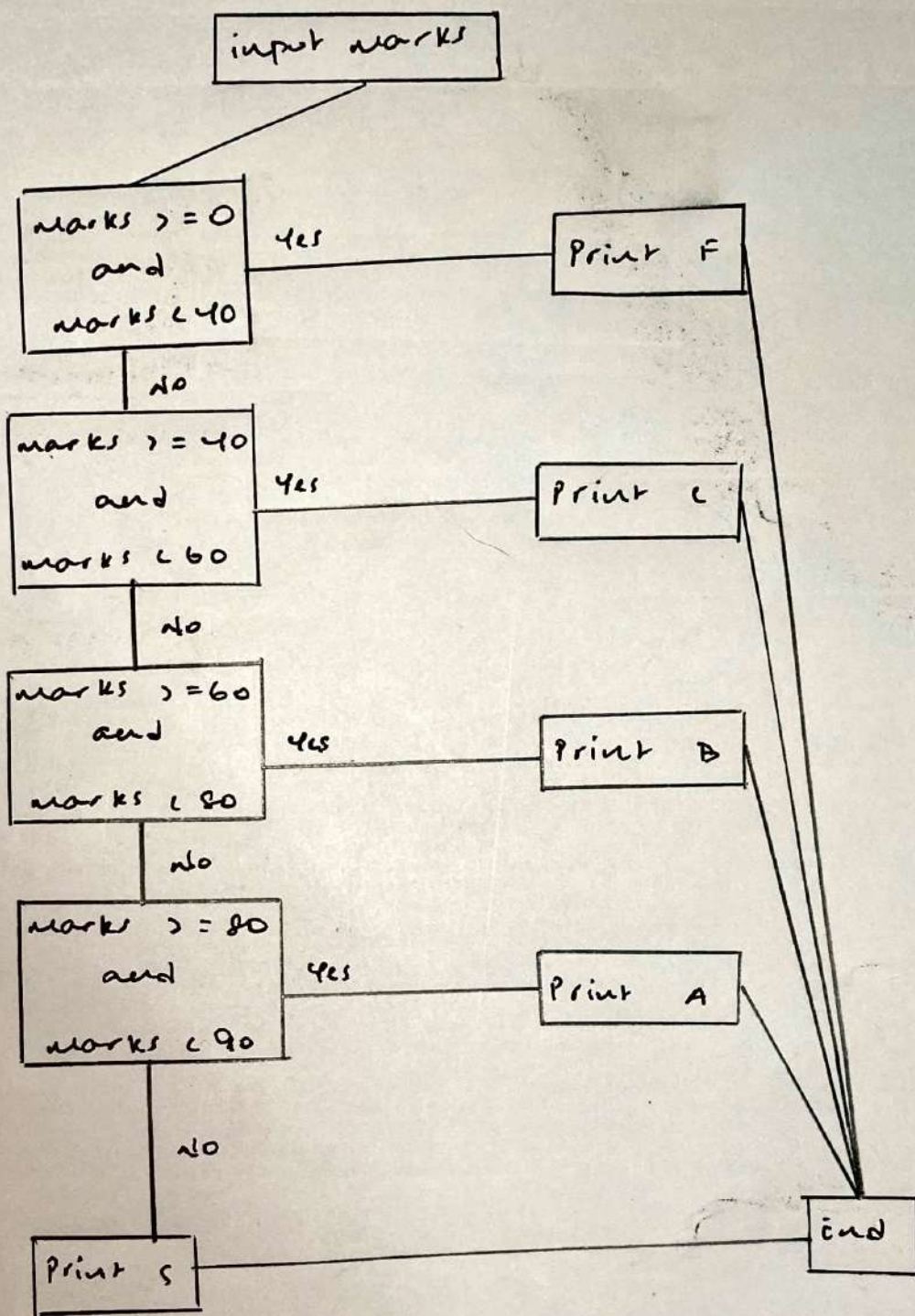
```
    else if (marks >= 80 && marks < 90)
```

```
        printf("A");
```

```
    else
```

```
        printf("S");
```

Flow chart



cyclomatic complexity

$$\begin{aligned} E &= N + 2 \\ &= 14 - 11 + 2 \\ &= 5 \end{aligned}$$

Test cases

Test input	Expected output
99	S
80	A
82 79	B
53	C
35	F
-5	Invalid