

**AIM: Compute First and follow sets of given grammar.**

**Output:**

```
Enter the number of Productions:3
```

```
S->AB
```

```
A->^
```

```
B->b
```

```
Grammar:
```

```
S->AB
```

```
A->^
```

```
B->b
```

```
First(S) = { b }
```

```
First(A) = { ^ }
```

```
First(B) = { b }
```

```
Follow(S) = { $ }
```

```
Follow(A) = { b }
```

```
Follow(B) = { $ }
```

```
Enter the number of Productions:6
```

```
S->A
```

```
S->B
```

```
S->C
```

```
A->a
```

```
B->b
```

```
C->c
```

```
Grammar:
```

```
S->A
```

```
S->B
```

```
S->C
```

```
A->a
```

```
B->b
```

```
C->c
```

```
First(S) = { a b c }
```

```
First(A) = { a }
```

```
First(B) = { b }
```

```
First(C) = { c }
```

```
Follow(S) = { $ }
```

```
Follow(A) = { $ }
```

```
Follow(B) = { $ }
```

```
Follow(C) = { $ }
```

Enter the number of Productions:5

S→Aa

S→Bb

A→a

A→^

B→b

Grammar:

S→Aa

S→Bb

A→a

A→^

B→b

First(S) = { a b }

First(A) = { a ^ }

First(B) = { b }

Follow(S) = { \$ }

Follow(A) = { a }

Follow(B) = { b }

Enter the number of Productions:6

S→Aa

S→Bb

A→a

A→^

B→b

B→^

Grammar:

S→Aa

S→Bb

A→a

A→^

B→b

B→^

First(S) = { a b }

First(A) = { a ^ }

First(B) = { b ^ }

Follow(S) = { \$ }

Follow(A) = { a }

Follow(B) = { b }

Enter the number of Productions:6

S→Aa

S→Bb

A→cA

A→^

B→dB

B→^

Grammar:

S→Aa

S→Bb

A→cA

A→^

B→dB

B→^

First(S) = { c a d b }

First(A) = { c ^ }

First(B) = { d ^ }

Follow(S) = { \$ }

Follow(A) = { a }

Follow(B) = { b }

Enter the number of Productions:5

S→aACbc

A→x

A→^

C→y

C→^

Grammar:

S→aACbc

A→x

A→^

C→y

C→^

First(S) = { a }

First(A) = { x ^ }

First(C) = { y ^ }

Follow(S) = { \$ }

Follow(A) = { y c }

Follow(C) = { b }