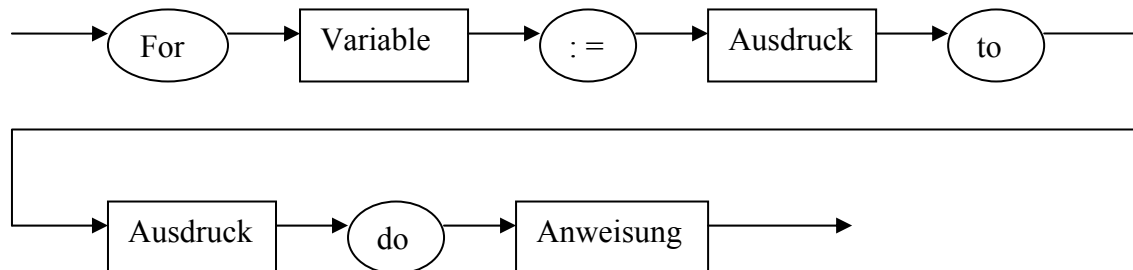


**Aufgabe 1 :**



**Aufgabe 2 :**

$N = (\{0, 1, 2, 3, 4, 5, 6, 7, 8, 9\}^* \mid (\{1, 2, 3, 4, 5, 6, 7, 8, 9\}, \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9\}))$

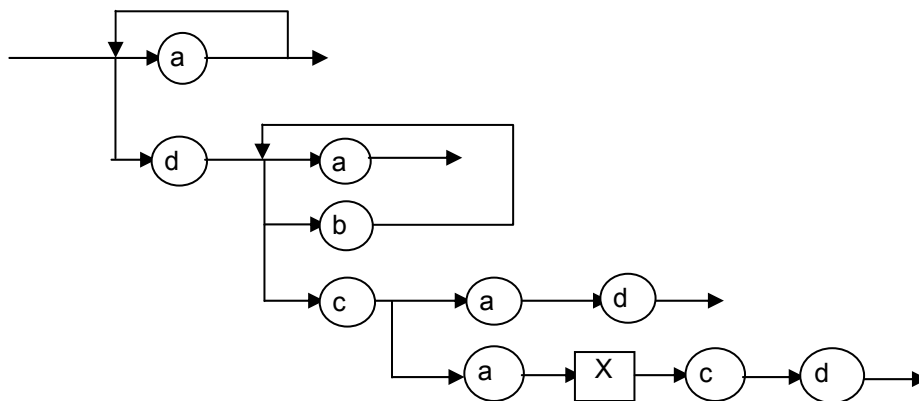
**Aufgabe 3 :**

b)

a	ja
adba	ja
aabcabcd	nein
aabcaacadbacd	ja
adbbbcabd	nein

a)

X :



$X = \{a\} \mid (d^* a \mid \{b\} \mid c^* ((a^* X c^* d^*) \mid (a^* d^*))) \mid (a^* \mid \{b\} \mid c^* ((a^* X c^* d^*) \mid (a^* d^*)))$

#### Aufgabe 4 :

```
Program Hexadezimal;  
uses crt;
```

```
var Zahl,i : integer;  
    HZ      : string;
```

```
Begin
```

```
  clrscr;  
  Write('Bitte geben Sie eine Zahl ein : ');readln(Zahl);
```

```
  HZ:="";
```

```
  Repeat
```

```
    case (Zahl mod 16) of
```

```
      0 : HZ:=HZ+'0';
```

```
      1 : HZ:=HZ+'1';
```

```
      2 : HZ:=HZ+'2';
```

```
      3 : HZ:=HZ+'3';
```

```
      4 : HZ:=HZ+'4';
```

```
      5 : HZ:=HZ+'5';
```

```
      6 : HZ:=HZ+'6';
```

```
      7 : HZ:=HZ+'7';
```

```
      8 : HZ:=HZ+'8';
```

```
      9 : HZ:=HZ+'9';
```

```
     10 : HZ:=HZ+'A';
```

```
     11 : HZ:=HZ+'B';
```

```
     12 : HZ:=HZ+'C';
```

```
     13 : HZ:=HZ+'D';
```

```
     14 : HZ:=HZ+'E';
```

```
     15 : HZ:=HZ+'F';
```

```
    end;
```

```
    Zahl:=Zahl div 16;
```

```
  Until Zahl = 0;
```

```
  Write('Hexadezimaldarstellung : ');
```

```
  For i:= Length(HZ) downto 1 do
```

```
    write(HZ[i]);
```

```
  readln;
```

```
End.
```