

# Lösungen der Übungsaufgaben

Folie 34:

```
code(if e then st fi) p = codeR e p; fpj m1; code st p; m1:
```

Folie 35:

```
p(a)=5, p(b)=6, p(c)=7
```

```
code(while a > b do c:= c+1; a:= a-b od) p
```

```
= m1: ldc a 5; ind i; ldc a 6; ind i; grt i; fjp m2; ldc a 7; ldc a 7; ind i;  
    ldc i 1; add i; sto i; ldc a 5; ldc a 5; ind i; ldc a 6; ind i; sub i; sto i;  
    ujp m1; m2:
```

```
p(i)=5
```

```
code( for i:=1 to 10 do st od) =?
```

```
for i:=1 to 10 do st od; entspricht
```

```
    i:=1;
```

```
    while i<=10 do st ; i:= i+1 od
```

```
-> code(for...) =
```

```
ldc a 5; ldc i 1; sto i;
```

```
m1: ldc a 5; ind i; ldc i 10; leq i; fjp m2; code(st);code(i:=i+1);
```

```
ujp m1; m2:
```

```
dabei ist code(i:=i+1) = ldc a 5; ldc a 5; ind i; ldc i 1; add i; sto i;
```