UNITS 9 TO 11: CODE OPTIMIZATION AND GENERATION

Generate intermediate code for the following parts of Pascal programs:

1.

```
radius = 3;
area = PI*radius*radius;
length = PI*radius*2;
```

2.

```
size = 5;
area_c = side*side;
perim_c = size+size+size+size;
area_t = size*size/2;
perim_t = size+size+size;
```

3.

```
if (a>b) and (b>c) then
        begin
                min := c;
                max := a;
        end
```

4.

```
if a>b then
begin
if b>c then
begin
max := a;
med := b;
min := c;
end
else
if a>c then
begin
max := a;
med := c;
min := b;
end
else
begin
max := c;
med := a;
min := b;
end
end
```

5.

```
 case month of
        2:
                days := 28;
        4, 6, 9, 11:
                days := 30;
        1, 3, 5, 7, 8, 10, 12:
                days := 31;
end;
```

6.

```
while n>0 do
        begin
                fact := fact*n;
                n := n-1;
        end;
```

David Griol Barres, Antonio Berlanga de Jesús, Jesús García Herrero, Juan Manuel Alonso Weber