

H. Altuğ Yıldırım  
090100252

1)

```
fibonacci:=proc(n)
  local x;
  begin x:=(1+sqrt(5))/2;
    Fn:=(x^n-(x-sqrt(5))^n)/sqrt(5);
    print(simplify(Fn));
  end;
```

2) 3, 5

3)

```
f:=(1/2)*m*v^2;
g:=subs(f,m=1);
for b from 1 to 3 do
  print(subs(g,v=b))
end_for
```

4)a)T

b)F

c)F

5)

```
program heyoy
  integer:: a, square
  real::squareroot
  loop1: do
    read *, a
    if (a==666) then
      print *, "HELL AND FIRE"
      exit
    else if (modulo(a,2)==0) then
      print *, a**(0.5)
    else if (modulo(a,2)/=0) then
      print *, a**2
    end if
  end do loop1
end program heyoy
```