

### Question 3c:

```
> d := 1000;
p := prevprime(2^30);
for i to 7 do
  A := Randpoly(d,x) mod p;
  B := Randpoly(d,x) mod p;
  st := time();
  G := Gcd(A,B) mod p;
  tt := time()-st;
  printf("deg=%d G=%a time=%7.3fsecs \n",d,G,tt);
  d := 2*d;
od;
```

Typesetting:-mprintslash([(d := 1000)],[1000])  
Typesetting:-mprintslash([(p := 1073741789)],[1073741789])  
deg=1000 G=1 time= 0.022secs  
deg=2000 G=1 time= 0.045secs  
deg=4000 G=1 time= 0.107secs  
deg=8000 G=1 time= 0.444secs  
deg=16000 G=1 time= 1.754secs  
deg=32000 G=1 time= 6.771secs  
deg=64000 G=1 time= 27.183secs