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| **PrimePrinter.java - package** literateProgramming; |

**public class** PrimePrinter {

**public static void** main(String[] args) {

**final int** M = 1000;

**final int** RR = 50;

**final int** CC = 4;

**final int** ORDMAX = 30;

**int** P[] = **new int**[M+1];

**int** PAGENUMBER;

**int** PAGEOFFSET;

**int** ROWOFFSET;

**int** C;

**int** J;

**int** K;

**boolean** JPRIME;

**int** ORD;

**int** SQUARE;

**int** N=0;

**int** MULT[] = **new int**[ORDMAX+1];

J=1;

K=1;

P[1] = 2;

ORD = 2;

SQUARE = 9;

**while** (K < M) {

**do** {

J += 2;

**if** (J == SQUARE) {

ORD++;

SQUARE=P[ORD]\*P[ORD];

MULT[ORD-1]=J;

}

N=2;

JPRIME=**true**;

**while** (N < ORD && JPRIME) {

**while** (MULT[N]<J)

MULT[N] += P[N] + P[N];

**if** (MULT[N] == J)

JPRIME=**false**;

N++;

}

} **while** (!JPRIME);

K++;

P[K]=J;

}

PAGENUMBER = 1;

PAGEOFFSET = 1;

**while** (PAGEOFFSET <= M) {

System.out.print(**"The First "**);

System.out.print(Integer.toString(M));

System.out.print(**" Prime Numbers --- Page "**);

System.out.print(Integer.toString(PAGENUMBER));

System.out.println(**"\n"**);

**for** (ROWOFFSET=PAGEOFFSET; ROWOFFSET <= PAGEOFFSET+RR-1; ROWOFFSET++) {

**for** (C=0; C <= CC-1; C++)

**if** (ROWOFFSET+C\*RR <= M)

System.out.printf(**"%10d"**, P[ROWOFFSET+C\*RR]);

System.out.println();

}

System.out.println(**"\f"**);

PAGENUMBER++;

PAGEOFFSET += RR\*CC;

}

}

}