

Class Quiz Results

Code fragment 1:

```
program fac(input, output)
  var
    i, n, f : integer;
begin
  readln(n);
  f := 1;
  for i := 1 to n do
    f := f * i;
  writeln(f)
end.
```

Pascal: 8

the correct answer

Ada: 6

Prolog: 5

Fortran77/90: 4

Lisp: 4

Cobol 3

Algol: 2

Haskell: 2

Basic: 1

C: 1

PL/I: 1

Code fragment 2:

```
PROGRAM FAC
READ (*,*) N
K = 1
DO 100 I = 1, N
  K = K*I
100 CONTINUE
WRITE (*, *) K
END
```

Fortran77/90: 18

the correct answer

Basic: 9

Cobol: 4

Algol60: 3

Haskell: 2

Ada: 1

Pascal: 1

Smalltalk80: 1

Code fragment 3:

```
fac 1 = 0
```

```
fac n = n * fac (n-1)
```

C: 6

Smalltalk80: 6

Fortran77/90: 5

Lisp: 5

Haskell: 3 *the correct answer*

Pascal: 3

Basic: 2

Cobol: 2

Prolog: 2

Ada: 1

C++: 1

Code fragment 4:

```
FAC: PROCEDURE OPTIONS (MAIN);
```

```
  DECLARE (i, n, f) : FIXED;
```

```
  f = 1;
```

```
  GET n;
```

```
  DO i = 1 TO n;
```

```
    f = f * i;
```

```
  END;
```

```
  PUT f;
```

```
END FAC;
```

Pascal: 11

Basic: 8

Fortran77/90: 8

Cobol: 5

Haskell: 4

Ada: 1

Algol60: 1

Prolog: 1

PL/I: 0

the correct answer

Code fragment 5:

fac(1, 1).

fac(N, F) :- N1 is N-1, fac(N1, F1), F is F*N.

Lisp: 8

Prolog: 5

the correct answer

Ada: 5

Fortran77/90: 4

Pascal: 4

Haskell: 3

PL/I: 3

Algol60: 2

Basic: 2

Smalltalk80: 2

Cobol: 1

Code fragment 6:

```
(DEFINE (fac n)
  (COND
    ((= n 0) 1)
    (ELSE (* n (fac (- n 1)))))
  )
)
```

Lisp: 9

the correct answer

Prolog: 8

Haskell: 4

Pascal: 4

Algol60: 3

Ada: 2

C: 2

Cobol: 2

Fortran77/90: 1

PL/I: 1

Code fragment 7:

```
class Fac
{ public static void main(String args[]) throws IOException
  { DataInputStream in = new DataInputStream(System.in);
    int n = Integer.parseInt(in.readLine());
    int i, f = 1;
    for (i = 1; i <= n; i++)
      f *= i;
    System.out.println(f);
  }
}
```

Java: 37

C++: 3

C: 1

PL/I :1

the correct answer