Codificação em Linguagem Modula-2

```
MODULE ALG01;
  IMPORT Out;

  BEGIN
    Out.String("Bom dia");
    Out.Ln;
  END ALG01.
```

```
MODULE ALG02;
  IMPORT In, Out;

  VAR
    X: INTEGER;
  BEGIN
    In.Int(X);
    Out.Int(X, 0);
    Out.Ln;
  END ALG02.
```

```
MODULE ALG03;
  IMPORT In, Out;

  VAR
    X, Y: INTEGER;
  BEGIN
    In.Int(X);
    Y := X * X;
    Out.Int(Y, 0);
    Out.Ln;
  END ALG03.
```

```
MODULE ALG04;
  IMPORT In, Out;

  VAR
    X, Y, Z: INTEGER;
  BEGIN
    In.Int(X);
    In.Int(Y);
    Z := X + Y;
    Out.Int(Z, 0);
    Out.Ln;
  END ALG04.
```

```
MODULE ALG05;
  IMPORT In, Out;

  VAR
    X, Y, Z: INTEGER;
  BEGIN
    In.Int(X);
    In.Int(Y);
    Z := X * X + Y * Y;
    Out.Int(Z, 0);
    Out.Ln;
  END ALG05.
```

```
MODULE ALG06;
  IMPORT In, Out;

  VAR
    X: INTEGER;
  BEGIN
    In.Int(X);
    IF X > 100 THEN
      Out.Int(X, 0);
      Out.Ln;
  END ALG06.
```

```
MODULE ALG07;
  IMPORT In, Out;

  VAR
    X, Y, Z: INTEGER;
  BEGIN
    In.Int(X);
    In.Int(Y);
    IF X > 100 THEN
      BEGIN
        Z := X + Y;
        Out.Int(Z, 0);
        Out.Ln;
      END;
  END ALG07.
```

```
MODULE ALG08;
  IMPORT In, Out;

  VAR
    X, Y: INTEGER;
  BEGIN
    In.Int(X);
    In.Int(Y);
    IF X <= Y THEN
      Out.Int(X, 0)
    ELSE
      Out.Int(Y, 0);
    Out.Ln;
  END ALG08.
```

```
MODULE ALG09;
  IMPORT In, Out;

  VAR
    X, Y: INTEGER;
  BEGIN
    In.Int(X);
    IF X >= 10 THEN
      Y := X * X
    ELSE
      Y := X * X * X;
    Out.Int(Y, 0);
    Out.Ln;
  END ALG09.
```

```
MODULE ALG10;
  IMPORT In, Out;

  VAR
    X,   Y,   N1,   N2:
INTEGER;
  BEGIN
    In.Int(X);
    In.Int(Y);
    IF X > Y THEN
      BEGIN
        N1 := Y;
        N2 := X;
      END
    ELSE
      BEGIN
        N1 := X;
        N2 := Y;
      END;
    Out.Int(N1, 0);
    Out.Ln;
    Out.Int(N2, 0);
    Out.Ln;
  END ALG10.
```

```
MODULE ALG11;
  IMPORT In, Out;

  VAR
    X, I: INTEGER;
  BEGIN
    X := 0;
    I := 1;
    WHILE I <= 10 DO
      BEGIN
        Out.Int(X, 0);
        Out.Ln;
        X := X + 2;
        I := I + 1;
      END;
  END ALG11.
```

```
MODULE ALG12;
  IMPORT In, Out;

  VAR
    X, I: INTEGER;
  BEGIN
    X := 1;
    I := 1;
    WHILE I <= 10 DO
      BEGIN
        Out.Int(X, 0);
        Out.Ln;
        X := X * 2;
        I := I + 1;
      END;
  END ALG12.
```