**ЛБ-11 – Интерполяция**

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| **Задание 1** | **Задание 2** |
| **program** lb\_11;  **const**  n = 10;  **type**  a = **array** [1..n] **of** real;  **var**  x: a = (0.71, 0.81, 0.91, 1.01, 1.11, 1.21, 1.31, 1.41, 1.51, 1.61);  y: a = (2.03, 2.25, 2.48, 2.75, 3.03, 3.35, 3.71, 4.1, 4.53, 5);  x1, y1: real;  i: integer;  **procedure** L (x, y: a; x1: real; **var** y1: real);  **var**  i, j: integer;  p: real;  **begin**  y1:= 0;  **for** i:= 1 **to** n **do**  **begin**  p:= 1;  **for** j:= 1 **to** n **do**  **if** j <> i **then**  p:= p \* (x1 - x[j]) / (x[i] - x[j]);  y1:= y1 + p \* y[i];  **end**;  writeln(x1:8:2, y1:8:2)  **end**;  **begin**  L(x, y, 0.85, y1);  L(x, y, 1.27, y1);  **end**.  0.85 2.33  1.27 3.56 | **program** lb\_11;  **const**  n = 6;  **type**  a = **array** [1..n] **of** real;  **var**  x, y: a;  x1, y1: real;  f: text;  i: integer;  **procedure** L (x, y: a; x1: real; **var** y1: real);  **var**  i, j: integer;  p: real;  **begin**  y1:= 0;  **for** i:= 1 **to** n **do**  **begin**  p:= 1;  **for** j:= 1 **to** n **do**  **if** j <> i **then**  p:= p \* (x1 - x[j]) / (x[i] - x[j]);  y1:= y1 + p \* y[i];  **end**;  writeln(x1:8, y1:8:4)  **end**;  **begin**  assign (f, 'in.txt');  reset (f);  **for** i:= 1 **to** n **do**  readln(f, x[i], y[i]);  x1:= 100;  **repeat**  L(x, y, x1, y1);  x1:= x1 + 50  **until** x1 > 600;  close(f)  **end**.  100 6.9500  150 6.9708  200 7.0500  250 7.1226  300 7.1700  350 7.2038  400 7.2500  450 7.3331  500 7.4600  550 7.6043  600 7.6900 |