

### Questions for self-control

1. Specify cases in which the operator FORMAT.
2. Name the format specifications.
3. Give examples of data format specifications for valid types.
4. Describe code table PC. What are ways to input and output symbols.
5. Set the cause distortions characters in different modes PC software.

### Tasks for independent work

1. Provided dependence:

which determine the number of activated charcoal ( $m^3$ ), its layer height (m) and diameter (m) batch adsorber for treating gasoline-air mixture from the gasoline fumes. Initial concentration petrol  $0.028 \text{ kg} / m^3$ , the dynamic activity of coal for fuel, the final activity after desorption, coal bulk density  $\text{kg} / m^3$ . Duration desorption, drying and cooling the adsorbent is h. Perform calculations provided cost =  $2500 \text{ m}^3 / \text{h}$ ; mixture flow rate =  $0.1 \dots 1.1 \text{ m} / \text{s}$   $0.05 \text{ m} / \text{s}$ . The results draw in tabular form.

2. Heat chambers has a wall thickness (m) thermal conductivity. The temperature in the chamber outside -. The coefficient of heat into the environment, in the middle of the oven. Determine the temperature dependence of the walls inside and outside, and heat flux by the formulas:

Build a table of payments under the conditions of 0.01 m increments.

3. Cover unit radius  $a = 0,33 \text{ m}$  and thickness  $k = 0,02 \text{ m}$  are under pressure  $p = 0,15 \text{ MPa}$ . Define stress and deflection walls I, if it is made of steel ( $E = 2,1 \cdot 10^5 \text{ MPa}$ ,  $\mu = 0,31$ ) in increments of the radius. The results placed in the table. Formulas for the calculation:

4. Provided formulas for calculating stress  $\sigma_r$  and  $\sigma_T$ , u moving to wall steel cylinders:

Balloon Sizes:  $r_1 = 0,21 \text{ m}$ ,  $r_2 = 0,44 \text{ m}$ . The pressure in the tank  $p_1 = 162 \text{ MPa}$ , outside -  $p_2 = 32 \text{ MPa}$ . Modulus and Poisson's ratio for steel respectively.

Print table quantities  $\sigma_T$ ,  $\sigma_r$ , u, R increments the radius  $\Delta R = 0,01 \text{ m}$ .

5. Determine the displacement of midline wall steel tube =  $0.2 \text{ m} = 0.32 \text{ m}$  and related values. Poisson's ratio for steel = 0.3; modulus  $E = 2 \cdot 10^5 \text{ MPa}$ ; = 2. Calculation formula:

Build a table of results for the load pressure  $P = 123 \text{ MPa}$ ,  $P = 1 \dots 23.3 \text{ MPa}$  increments of 0.01 MPa.