LABORATORY WORK N 8

Programming with functions

The purpose of the work's - Learn practical skills in programming with functions

Task for individual work

1. Study the section of lectures dedicated to functions;
2. Develop an algorithm for solving the problem
3. Develop a program in C ++ language for solving problem
4. Run the program on your computer

Example

Calculate sum of array elements

```
#include <iostream>

using namespace std;

int vag (int b[],int n); // prototype

int main ()

{ int a[7]={2,4,5,12};

 int s1;

s1=vag(a,2);

cout<<s1;;

return(0);

}

int vag (int b[],int n)

{  int s=0,i;

for (i=0;i<=n;i++)

 s=s+b[i];     return(s); }
```

Tasks for individual work

4 arrays T,P,Q,R are given. Dimension of these arrays=10. Use the corresponding functions **SUM, PROD,MIN,MAX and** calculate the expression :

1. Y=max(T,5)*min(P,7)+max(Q,8)*prod(R,4)
2. Y=min(T,6)*sum(P,8)+min(Q,7)*prod(R,9)
3. Y=prod(T,9)*max(P,8)+max(Q,6)*sum(R,7)
4. Y=max(T,5)/sum(P,6)+min(Q,6)/prod(R,3)
5. Y=max(T,7)/sum(P,4)+min(Q,8)/prod(R,4)
6. Y=sum(T,8)/max(P,5)-prod(Q,5)/min(R,7)
7. Y=min(T,5)/max(P,6)-max(Q,6)/min(R,9)
8. Y=prod(T,7)/min(P,6)+sum(Q,6)*max(R,9)
9. Y=max(T,8)/sum(P,6)-prod(Q,6)*min(R,9)
10. Y=sum(Q,8)/prod(P,6)-min(T,4)/max(R,9)
11. Y=sum(Q,7)-prod(P,4)+min(T,5)*max(R,6)
12. Y=prod(Q,10)*sum(P,4)+min(T,9)/max(R,4)
13. Y=max(Q,10)*sum(P,10)+max(T,9)/min(R,8)
14. Y=prod(Q,8)*min(P,9)+sum(T,7)/max(R,6)
15. Y=min(Q,9)*sum(P,8)-max(T,6)/min(R,7)