MINISTRY OF EDUCATION OF THE REPUBLIC OF BELARUS

EDUCATIONAL INSTITUTION

«BREST STATE TECHNICAL UNIVERSITY»

Department of IIT

**Laboratory work №10**

**For the second semester**

**Topic: «C Functions »**

Completed by the 1st year student of

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**Laboratory work №10**

**Topic: «C Functions»**

**Goal:** to learn how C functions work and try to use this knowledge in practice.

**Task 1.**

#include <stdio.h>

#include <stdlib.h>

int max(int num1, int num2);

int main()

{

int a = 100;

int b = 200;

int ret;

ret = max(a, b);

printf("Max value is : %d\n", ret);

system("pause");

return 0;

}

int max(int num1, int num2)

{

int result;

if (num1 > num2)

result = num1;

else

result = num2;

return result;

}

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**Task 2.**

#include <stdio.h>

#include <stdlib.h>

void swap(int x, int y);

int main()

{

int a = 100;

int b = 200;

printf("Before swap, value of a : %d\n", a);

printf("Before swap, value of b : %d\n", b);

swap(a, b);

printf("After swap, value of a : %d\n", a);

printf("After swap, value of b : %d\n", b);

system("pause");

return 0;

}

void swap(int x, int y)

{

int temp;

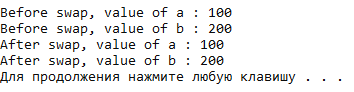
temp = x;

x = y;

y = temp;

return;

}



**Task 3.**

#include<stdlib.h>  
#include <stdio.h>

void swap(int\* x, int\* y);

int main()

{

int a = 100;

int b = 200;

printf("Before swap, value of a : %d\n", a);

printf("Before swap, value of b : %d\n", b);

swap(&a, &b);

printf("After swap, value of a : %d\n", a);

printf("After swap, value of b : %d\n", b);

system("pause");

return 0;

}

void swap(int\* x, int\* y)

{

int temp;

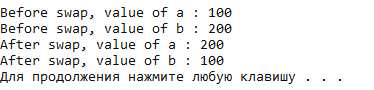
temp = \*x;

\*x = \*y;

\*y = temp;

return;

}

****

**Task 4.**

#include <iostream>

int Maximum(int x, int y);

int main()

{

int a, b;

std::cout << "Type two numbers: ";

std::cin >> a >> b;

std::cout << "Max one of those two is:" << Maximum(a, b) << std::endl;

system("pause");

return 0;

}

int Maximum(int x, int y)

{

if (x >= y) return x;

if (x < y) return y;

return 0;

}

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**Task 5.**

#include <stdio.h>

#include <stdlib.h>

#include <iostream>

int mult(int num1, int num2);

int main()

{

int a;

int b;

int ret;

std::cout << "Enter two numbers:";

std::cin >> a >> b;

ret = mult(a, b);

printf("Multiplication of two integers: %d\n", ret);

system("PAUSE");

return 0;

}

int mult(int num1, int num2)

{

int result;

result = num1 \* num2;

return result;

}

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Conclusion:** learn the main principles of functions in C and use them in practice.

