NAME: Sameer

Roll no:23k-5535

Section:BCS2D

Lab task:01 and 02

01:#include <stdio.h>

```c
float sameer(float pieces) {

    float sameer_eats = pieces * 0.15;

    printf("sameer eats %.2f slices from the pizza.\n", sameer_eats);

    return sameer_eats;

}


int main() {

    float pieces = 11.0;

    float result = sameer(pieces);


    return 0;

}
```

```
sameer eats 1.65 slices from the pizza.

--------------------------------
Process exited after 0.7274 seconds with return value 0
Press any key to continue . . .
```

02:

```c
#include <stdio.h>

float calculate_total_marks() {
    float total_marks = 100.0 + 100.0 + 100.0 + 100.0 + 100.0;
    printf("Total marks=%.2f\n", total_marks);
    return total_marks;
}

float calculate_percentage(float obtained_marks, float total_marks) {
    float percentage = (obtained_marks / total_marks) * 100.0;
    printf("Percentage=%.2f\n", percentage);
    return percentage;
}

int main() {
    float math_marks, english_marks, urdu_marks, physics_marks, computer_marks;
    printf("Enter the math marks: ");
    scanf("%f", &math_marks);
    printf("Enter the english marks: ");
    scanf("%f", &english_marks);
    printf("Enter the urdu marks: ");
    scanf("%f", &urdu_marks);
    printf("Enter the physics marks: ");
    scanf("%f", &physics_marks);
    printf("Enter the computer marks: ");
    scanf("%f", &computer_marks);
```

```c
    float obtained_marks = math_marks + urdu_marks + english_marks + physics_marks +
computer_marks;

    printf("Obtained marks=%.2f\n", obtained_marks);


    float total_marks = calculate_total_marks();

    float result2 = calculate_percentage(obtained_marks, total_marks);


    return 0;

}
```
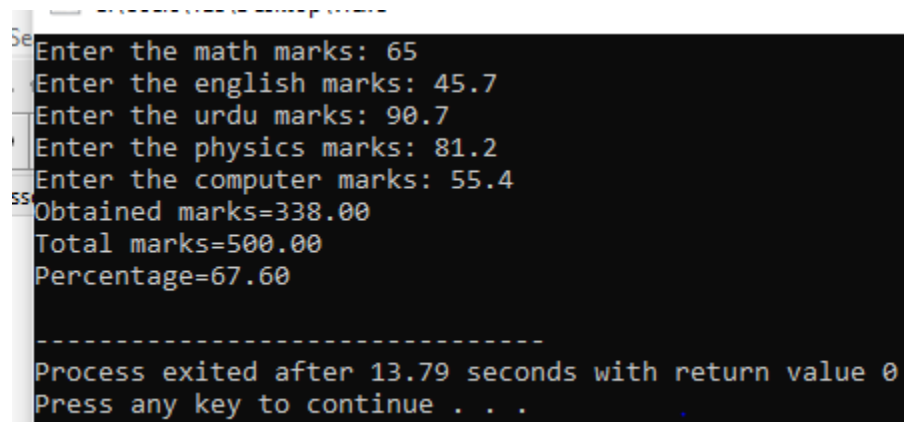
```
Enter the math marks: 65
Enter the english marks: 45.7
Enter the urdu marks: 90.7
Enter the physics marks: 81.2
Enter the computer marks: 55.4
Obtained marks=338.00
Total marks=500.00
Percentage=67.60

--------------------------------
Process exited after 13.79 seconds with return value 0
Press any key to continue . . .
```

01: function conditions function with argument and without return value

```c
#include <stdio.h>
void function_with_argument(int a,int b){


        int sum;
        sum=a+b;
        printf("sum=%d",sum);


}
int main(){
        int  a,b;
        printf("enter the a and b:");
        scanf("%d%d",&a,&b);
        function_with_argument(a,b);
        return 0;
}
```
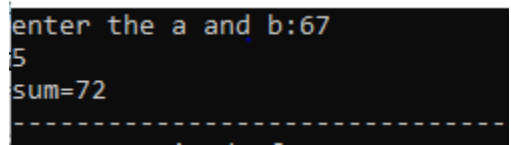
```
enter the a and b:67
5
sum=72
- - - - - - - - - - - - - - - - - - - - - - - -
```

02:    function without argument and with return value

```c
#include <stdio.h>

int without_arguments(){
int sum;

    return sum;

}
int main(){

    int a,b;

    printf("enter the a and b:");

    scanf("%d%d",&a,&b);

        int sum;

    sum=a+b;

    printf("sum=%d",sum);

    without_arguments();

    return 0;

}
```
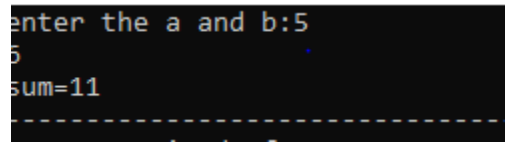
```
enter the a and b:5
5
sum=11
-----------------------------------
```

03:function without argument and without return value

```c
#include <stdio.h>

void function_without_argument() {        //function declaration
}

int main() {

        int num1,num2,sum;
        printf("enter the first number: ");
    scanf("%d", &num1);
    printf("enter the second number: ");
    scanf("%d", &num2);
    sum=num1+num2;

printf("sum=%d",sum);
    function_without_argument();   //function caling

    return 0;
}
```
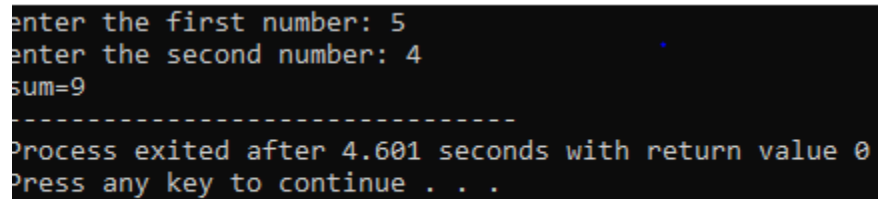
```
enter the first number: 5
enter the second number: 4
sum=9
--------------------------------
Process exited after 4.601 seconds with return value 0
Press any key to continue . . .
```

04:function with argument and with return value

```c
#include <stdio.h>

int sum(int a,int b){
sum=a+b;

printf("sum=%d",sum);
return sum;
}
int main(){
int a,b;
printf("enter the value of a and b :");
scanf("%d%d",&a,&b);
int result=sum(a,b);
return 0;
}
```

```
enter the a and b:5
6                    .
sum=11
-------------------------------
Process exited after 3.869 seconds with return value 0
Press any key to continue
```

01:

```c
#include <stdio.h>

int day(int day_number){                //function declaration
            if(day_number==1){
            printf("monday");
    }
    else if(day_number==2){
            printf("tuesday");
    }
    else  if(day_number==3){
            printf("wednesday");
    }
    else if(day_number==4){
            printf("thurssday");
    }
    else if(day_number==5){
            printf("friday");
    }
    else if(day_number==6){
            printf("saturday");
    }
    else if(day_number==7){
            printf("sunday");
    }
    else {
            printf("your choicen is wrong");
    }
```

```
}
int main(){

        int day_number;

        printf("enter the day number :");

        scanf("%d",&day_number);

int result=day(day_number);          //function calling

return 0;

}
```

```
enter the day number :6
saturday
-------------------------------
Process exited after 3.278 second
Press any key to continue
```

```
enter the day number :3
wednesday
-------------------------------
Process exited after 4.128 s
```

```
enter the day number :9
your choicen is wrong
-------------------------------
Process exited after 2.634 seconds with return value 0
Press any key to continue . . .
```

02:

```c
#include <stdio.h>
int vowel(char alphabet){
        if(alphabet=='a'){
                printf("vowel");
        }
        else if(alphabet=='e'){
                printf("vowel");
        }
        else if(alphabet=='i'){
                printf("vowel alphabet");
        }
        else if(alphabet=='o'){
                printf("vowel alphabet");
        }


        else if(alphabet=='u'){
                printf("vowel alphabet");
        }


        else {
                printf("consonant alphabet");
        }
        return alphabet;
}
int main(){
        char alphabet;;

        printf("enter the alphabet:");
```

```c
scanf("%c",&alphabet);

int result=vowel(alphabet);

return 0;



}
```

```
enter the alphabet:a
vowel
-------------------------
```

```
enter the alphabet:o
vowel alphabet
-------------------------------
```

```
enter the alphabet:h
consonant alphabet
-------------------------
```

03:

```c
#include <stdio.h>
int main() {
float price_rice,price_sugar, price_cooking_oil, price_tea, price_milk;
float total_price;
//taking price rate of items from user using printf and scanf functions
printf("Enter price of rice: ");
scanf("%f", &price_rice);
printf("Enter price of sugar: ");
scanf("%f", &price_sugar);
printf("Enter price of cooking oil: ");
scanf("%f", &price_cooking_oil);
printf("Enter price of tea: ");
scanf("%f", &price_tea);
printf("Enter price of milk: ");
scanf("%f", &price_milk);
total_price = price_rice + price_sugar + price_cooking_oil + price_tea + price_milk;
printf("total price : $%.2f\n", total_price);
if (total_price > 2000) {
total_price *= 0.9;
printf("total price after discount is %.2f",total_price);
}
return 0;}
```

```
Enter price of rice: 400
Enter price of sugar: 300
Enter price of cooking oil: 800
Enter price of tea: 200
Enter price of milk: 150
total price : $1850.00

--------------------------------
```

```
Enter price of rice: 400
Enter price of sugar: 1200
Enter price of cooking oil: 400
Enter price of tea: 200
Enter price of milk: 150
total price : $2350.00
total price after discount is 2115.00
--------------------------------
Process exited after 14.27 seconds with retu
```

04:

```c
#include <stdio.h>
float triangle(float  side1,float side2,float side3){

    if (side1 + side2 > side3 && side1 + side3 > side2 && side2 + side3 > side1) {
        printf("triangle is valid");
    } else {
        printf("triangle is not valid ");
    }
}

int main() {
    float side1, side2, side3;


    printf("Enter the lengths of three sides of the triangle:\n");
    printf("Side 1: ");
    scanf("%f", &side1);
    printf("Side 2: ");
    scanf("%f", &side2);
    printf("Side 3: ");
    scanf("%f", &side3);

    float result=triangle(side1,side2,side3);

    return 0;
}
```

```
Enter the lengths of three sides of the triangle:
Side 1: 45
Side 2: 23
Side 3: 67
triangle is valid
---------------------------------
```