Name – koustav moitra

(Assignment 2)

1. Print "your name – SOA University".

Program-

```c
#include<stdio.h>
int main()
{
    printf("koustav moitra-SOA university");
    return 0;
}
```

Output-

koustav moitra-SOA university

2. Print your name, mobile number and email id in different lines.

Program-

```c
#include<stdio.h>
int main()
{
    printf("koustav moitra\n koustavmoitra711@gmail.com\n 7377373908\n");
    return 0;
}
```

Output-

koustav moitra

 koustavmoitra711@gmail.com

 7377373908

3. Get int, float and char as input, then print the same

Program-

```c
#include<stdio.h>
int main()
{
    int num1;
    float num2;
    char chr;

    printf("Enter a number: ");
    scanf("%d", &num1);
    printf("Number = %d\n",num1);

    printf("Enter a number: ");
    scanf("%f", &num2);
    printf("Number = %f\n",num2);

    printf("Enter a character: ");
    scanf("%s", &chr);
    printf("character = %s\n",chr);
   return 0;
}
```

Output-

Enter a number: 4

Number = 4

Enter a number: 5.2

Number = 5.200000

Enter a character: koustav

// sir ,

As in this program output for both integer number and floating number are showing that number=4 and number=5.200000 but in case of character why it is not showing character =koustav //

4. Find the cube of the given number

Program-

```c
#include<stdio.h>
int main()
{
    int a;
    printf("enter a number:");
    scanf("%d",&a);
    a=a*a*a;
    printf("cube=%d",a);
    return 0;
}
```

Output-

enter a number:5

cube=125

5₅. Find the sum of five given numbers.

Program-

```c
#include<stdio.h>
int main()
{
    int a=1,b=2,c=3,d=4,e=5,sum;

    sum=a+b+c+d+e;
    printf("sum is %d",sum);
  return 0;
}
```

Output-

sum is 15

6.Find a student average mark given mark1 and mark2.

Program-

```c
#include<stdio.h>
int main()
{
    int mark1,mark2;
    float avg;
    printf("enter the mark1\n");
    scanf("%d",&mark1);
    printf("enter mark2\n");
    scanf("%d",&mark2);
    avg = ( mark1 + mark2 ) / 2;


    printf("avg is %f",avg);

    return 0;


}
```

Output-

enter the mark1

10

enter mark2

20

avg is 15.000000

7. Calculate the total fine charged by library for late-return books. The charge is 0.20 INR for 1 day

Program-

```c
#include<stdio.h>
int main()
{
    int days;
    float fine;

  printf("Enter the number of days: ");
    scanf("%d", &days);

    if (days > 30)
        fine = 0.20 * days;

        if (days <= 30)
        {
            printf("You dont have a fine \n");
        }


    printf("You have to pay Rs %f fine", fine);

return 0;
}
```

Output-

- Enter the number of days: 10

You dont have a fine

You have to pay Rs 0.000000 fine

- Enter the number of days: 39

You have to pay Rs 7.800000 fine

8. You had bought a nice shirt which cost Rs.29.90 exclusive of 15% discount. Count the discounted price for the shirt.

Program-

```c
#include<stdio.h>
int main()
{
    float original_price=29.90,nett_price,discounted_price,discount=0.15;
discounted_price = (0.15 * original_price);
    printf("the discounted price is %f\n",discounted_price);

nett_price = ( 29.90 - discounted_price);
    printf("the nett price is %f\n",nett_price);


    return 0;
}
```

Output-

the discounted price is 4.485000

the nett price is 25.414999

9. swap two numbers with third variable

Program_

```c
#include<stdio.h>
int main()
 {

    double first, second, temp;

    printf("Enter first number: ");
    scanf("%lf", &first);

    printf("Enter second number: ");
    scanf("%lf", &second);

    temp=first;
    first=second;
    second=temp;

     printf("\nAfter swapping, firstNumber = %lf\n", first);
    printf("After swapping, secondNumber = %lf", second);
    return 0;
}
```

Output -

After swapping, firstNumber = 6.000000

After swapping, secondNumber = 5.000000

10. swap two numbers without third variable

Program-

```c
#include<stdio.h>
 int main()
{

    int a=10, b=20;
    printf("Before swapping a=%d b=%d",a,b);
        a=a+b;
        b=a-b;
        a=a-b;
    printf("\nAfter swapping a=%d b=%d",a,b);
    return 0;

}
```

Output-

Before swapping a=10 b=20

After swapping a=20 b=10