

Problem exercise no 1.1&1.2:

Coding of the programme:

```
#include<stdio.h>
void main()
{
printf("-----\n");
printf("I First line :Humayun Kabir I\nI Second line : Sector#10, Road#11, House#18\nI Third line:Uttara, Dhaka-1230I\n");
printf("-----");
}
```

Output:

Problem exercise no. 1.3:

Coding of the programme:

```
#include<stdio.h>
void main()
{
printf("\n* *\n* *\n* * * ");
}
```

Output:

```
*
* *
* * *
* * * *
```

Problem exercise no :1.4

Coding of the problem:

```
#include<stdio.h>
void main()
{
printf("a>>----->b");
}
```

Output:

```
a>>----->b
```

Problem exercise no:1.5

Coding of the problem:

```
#include<stdio.h>
#define pi 3.14159
```

```
void main()
{
float r,A;
printf("\n\tENTER THE RADIUS OF A CIRCLE=");
scanf("%f",&r);
A=pi*r*r;
printf("\n\n\tArea=%f sqr unit",A);
}
```

Output:

ENTER THE RADIUS OF A CIRCLE=2

Area=12.566360 sqr unit

Problem exercise no:1.6

CODING:

```
#include<stdio.h>
void main()
{
int b,c;
for(b=1;b<=10;b++)
{
c=5*b;
printf("\n\t%d*%d=%d\n",5,b,c);
}
}
```

Output :

5 x 1= 5
5 x 2= 10
5 x 3= 15
5 x 4= 20
5 x 5= 25
5 x 6= 30
5 x 7= 35
5 x 8= 40
5 x 9= 45
5 x 10= 50

Problem exercise no:1.7

Coding of the programme:

```
#include<stdio.h>
void add();
void sub();
```

```
void main()
{
    add();
    sub();
}
void add()
{
    printf("\n\t%d+%d=%d",20,10,30);
}
void sub()
{
    printf("\n\t%d-%d=%d",20,10,10);
}
```

Output :

20+10=30
20-10=10

Problem exercise no:1.8

Coding:

```
#include<stdio.h>
void main()
{
    int a,b,c,x;
    printf("Enter values of a,b&c\n");
    scanf("%d%d%d",&a,&b,&c);
    x=a/(b-c);
    printf("result=%d",x);
}
```

Output:

a)
Enter values of a,b&c
250
85
25
result=4
b)NO OUTPUT

Problem exercise no:1.9 (b)

Coding :

```
#include<stdio.h>
void main()
{
    float a,F,C;
```

```
printf("ENTER TEMPERATURE IN FARENHITE\n");
scanf("%f",&F);
a=5*(F-32);
C=a/9;
printf("\nIn celsius scale=%f",C);
}
```

Output :

```
ENTER TEMPERATURE IN FARENHITE
10
In Celsius scale=-12.222222
```

Problem exercise no:1.9 (a)**Coding :**

```
#include<stdio.h>
void main()
{
float a,F,C;
printf("ENTER TEMPERATURE IN CELSIUS\n");
scanf("%f",&C);
a=(9*C)/5;
F=a+32;
printf("\nIn farenhite scale=%f",F);
}
```

Output:

```
ENTER TEMPERATURE IN CELSIUS
10
In frenhite scale=50.00000
```

Problem exercise no: 1.10**Coding of the problem:**

```
#include<stdio.h>
#include<math.h>
void main()
{
float a,b,c,S,A;
printf("\n\tENTER THE THREE SIDES OF A TRIANGLE=");
scanf("%f%f%f",&a,&b,&c);
S=(a+b+c)/2;
A=sqrt(S*(S-a)*(S-b)*(S-c));
printf("\n\tArea of the triangle=%f",A);
}
```

Sample output:

```
ENTER THE THREE SIDES OF A TRIANGLE=10
12
14
Area of the triangle=58.787754
```

Problem exercise no:1.11

Coding:

```
#include<stdio.h>
#include<math.h>
void main()
{
float D,x1,x2,y1,y2;
printf("ENTER CO-ORDINATES x1,x2,y1,y2=\n");
scanf("%f%f%f%f",&x1,&x2,&y1,&y2);
D=sqrt((x1-x2)*(x1-x2)+(y1-y2)*(y1-y2));
printf("Result=%f",D);
}
```

Output :

```
ENTER CO-ORDINATES x1,x2,y1,y2=
2
4
8
5
Result=3.605551
```

Problem exercise no:1.12

Coding:

```
#include<stdio.h>
#include<math.h>
#define pi 3.14159

void main()
{
float r,x1,x2,y1,y2,A;
x1=0;
x2=0;
y1=4;
y2=5;
r=sqrt((x1-x2)*(x1-x2)+(y1-y2)*(y1-y2));
A=pi*r*r;
printf("Result=%f",A);
}
```

Output :

```
Result=3.14159
```

Problem exercise no:1.13

Coding:

```
#include<stdio.h>
#include<math.h>
#define pi 3.14159
void main()
{
```

```
float D,r,x1,x2,y1,y2,A;
x1=2;
x2=2;
y1=5;
y2=6;
D=sqrt((x1-x2)*(x1-x2)+(y1-y2)*(y1-y2));
r=D/2;
A=pi*r*r;
printf("Result=%f",A);
}
```

Output :

Result=0.785398

Problem exercise no:1.14

Coding:

```
#include<stdio.h>
void main()
{ int a,b,c;
a=5;
b=8;
c=18;
printf("%dx+%dy=%d",a,b,c);
}
```

Output :

5x+8y=18

Problem exercise no:1.15

Coding:

```
#include<stdio.h>
void main()
{ float x,y,sum,difference,product,division;
printf("ENTER TWO NUMBERS=\n");
scanf("%f%f",&x,&y);
sum=x+y;
difference=x-y;
product=x*y;
division=x/y;
printf("\n\tSum=%f\tDifference=%f\n\n\tProduct=%f\tDivision=%f",sum,difference,product,division);
}
```

Output :

ENTER TWO NUMBERS=

10

5

Sum=15.000000

Difference=5.000000

Product=50.000000

Division=2.000000

Assignments:

1. Write a program that will print your Name, Id and Program like following format.

Name: Your Name

Id: Your Id

Program: BCSE

2. Write a program to find the area of **Rectangle**.
3. Write a Program to find $S = ut + \frac{1}{2}at^2$ where the value of **a**, **u** and **t** are given.
4. Write a program to print the following format.

```
*****  
*****  
*****  
*****
```

5. Write a program to print the following format.

```
>>----->  
<-----<<
```