Practise Problem (Data Type and Variable) Lecture-02

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Problem - 01 :

Program:

```c
#include<stdio.h>
void main()
{
    int a,b;
    scanf("%d %d",&a,&b);
    printf("The addition of Two number is : %d\n",a+b);
    printf("The subtract of Two number is : %d\n",a-b);
    printf("The multiply of Two number is : %d\n",a*b);
    printf("The divide of Two number is : %d\n",a/b);

}
```

Output:

```
20 10
The addition of Two number is : 30
The subtract of Two number is : 10
The multiply of Two number is : 200
The divide of Two number is : 2

Process returned 32 (0x20)   execution time : 8.103 s
Press any key to continue.
```

Problem -02:

```c
#include<stdio.h>
void main()
{
    float a,b,c,ans;
    scanf("%f %f %f",&a,&b,&c);
    ans = (a+b+c) / 3 ;
    printf("Avarage of 3 number is : %0.3f\n",ans);
    getch();
}
```

Output :

```
"C:\Users\ROBOTICS LAB\Documents\problem-01.exe"

20 20 20
Avarage of 3 number is : 20.000
```

Problem -03:

```c
#include<stdio.h>
int main()
{
    double l,b;
    scanf("%lf %lf",&l,&b);
    printf("The Area of Rectangle's is : %0.2lf",l*b);
    return 0;
}
```

Output :

```
3 4
The Area of Rectangle's is : 12.00
Process returned 0 (0x0)   execution time : 3.424 s
Press any key to continue.
```

Problem -04:

```c
#include<stdio.h>
void main()
{
    double f,c;
    scanf("%lf",&f);
    c = ((f-32)*5)/9;
    printf("The temp is : %0.2lf Degree",c);
    getch();

}
```

Output:

```
98
The temp is : 36.67 Degree
```

Problem -05:

```c
//Simanta Kumar Roy
//221-35-909
#include<stdio.h>
void main()
{
    int a,b,t;
    scanf("%d %d",&a,&b);
    t = a;
    a = b;
    b = t;
    printf("%d %d",a,b);
    getch();
}
```

Output:

```
3 4
4 3
Process returned 103 (0x67)   execution time : 7.404 s
Press any key to continue.
```

Problem -06:

```c
/* Simanta kumar Roy
   221-35-909
*/

#include<stdio.h>
void main()
{
    double m;
    scanf("%lf",&m);
    printf("Distance in cm : %0.2lf\n",m*100);
    printf("Distance in inch : %0.2lf\n",m*39.37);
    printf("Distance in feet : %0.2lf\n",m*3.21);
    getch();
}
```

Output:

```
10
Distance in cm : 1000.00
Distance in inch : 393.70
Distance in feet : 32.10
```

Problem -07:

```c
/* Simanta kumar Roy
   221-35-909
*/

#include<stdio.h>
void main()
{
    int basic_salary,dearness_allowence,house_rent,gross_salary;
    scanf("%d",&basic_salary);
    dearness_allowence = basic_salary*0.40;
    house_rent = basic_salary*0.20;
    gross_salary = basic_salary+dearness_allowence+house_rent;
    printf("Gross Salary is :  %d",gross_salary);

    getch();
}
```

Output:

```
100
Gross Salary is :  160_
```

Problem -08:

```c
/* Simanta kumar Roy
   221-35-909
*/

#include<stdio.h>
void main()
{
    int s1,s2,s3,s4,s5;
    double Avarage;
    scanf("%d %d %d %d %d",&s1,&s2,&s3,&s4,&s5);
    printf("Total Number is : %d\n",s1+s2+s3+s4+s5);
    Avarage = (s1+s2+s3+s4+s5)/5;
    printf("Average Mark is : %0.2lf",Avarage);

    getch();
}
```

Output:

```
10 10 10 10 10
Total Number is : 50
Average Mark is : 10.00_
```

Problem -09:

```c
/* Simanta kumar Roy
   221-35-909
*/

#include<stdio.h>
void main()
{
  char c;
  scanf("%c",&c);
  printf("%d",c);

    getch();
}
```

Output:

```
A
65
```

Problem -10:

```c
/* Simanta kumar Roy
   221-35-909
*/

#include<stdio.h>
#define PI 3.1416
void main()
{
    double r;
    scanf("%lf",&r);
    printf("Area of circle is : %0.4f",PI*r*r);

    getch();
}
```

Output:

```
2
Area of circle is : 12.5664
```

Thank You