SOA UNIVERSITY

Subject

Programming and Data Structures using C

Assignment 2

Submitted By:
Ankeeta Kumari
MCA (Group 1)

Submitted To:
Prof. M. Thangavel
CSE,ITER,SOA

Write a C Program for the following problem statements

Q1. Print " your name–SOA University ".

```
#include <stdio.h>

int main()
{
printf("%s -SOA University","Ankeeta Kumari ");

return 0;
}
```

Output

Q2. Print your name, mobile number and email id in different lines.

```
#include <stdio.h>

int main()
{
printf("%s\n","Ankeeta kumari");
printf("%s\n","8210044689");
printf("%s\n","upadhyay.ankeeta@gmail.com");

return 0;
}
```

Output

Q3. Get int, float and char as input, then print the same.

```
#include <stdio.h>

int main()
{
char a[100];
int b;
float c;

printf("Enter the integer value :");
scanf("%d",&b);
printf("Enter the decimal value :");
scanf("%f",&c);
printf("Enter the character value :");
scanf("%s",&a);

printf("\t entered values \n integer - %d \n decimal - %f \n character - %s
",b,c,a);
return(0);
}
```

Output

```
Enter the integer value :123
Enter the decimal value :123
Enter the character value :hello
         entered values
 integer - 123
 decimal - 123.000000
 character - hello
```

Q4. Find the cube of the given number.

```
#include <stdio.h>

int main()
{
int b;


printf("Enter the value to find Cube :");
scanf("%d",&b);
b=b*b*b;
printf(" Ans. %d",b);
return(0);
}
```

Output

```
Enter the value to find Cube :3
 Ans. 27
```

Q5. Find the sum of five given numbers.

```
#include <stdio.h>

int main()
{
int a,b,c,d,e,f;
printf("Enter 1 number : ",a);
scanf("%d",&a);
printf("Enter 2 number : ",b);
scanf("%d",&b);
printf("Enter 3 number : ",c);
scanf("%d",&c);
printf("Enter 4 number : ",d);
scanf("%d",&d);
printf("Enter 5 number : ",e);
scanf("%d",&e);
f=a+b+c+d+e;

printf(" Sum of five number is %d",f);
return(0);
}
```

Output

```
Enter 1 number : 3
Enter 2 number : 7
Enter 3 number : 3
Enter 4 number : 7
Enter 5 number : 9
 Sum of five number is 29
```

Q6. Find a student average mark given mark1 and mark2.

```
#include <stdio.h>

int main()
{
float m1,m2;


printf("Enter the student Marks of subject 1 & 2 Respectively:\n");
scanf("%f %f",&m1,&m2);
m1=(m1+m2)/2;
printf("Average mark of student is %0.1f",m1);
return(0);
}
```

Output

```
Enter the student Marks of subject 1 & 2 Respectively:
3
8
Average mark of student is 5.5
```

Q7. Calculate the total fine charged by library for late return books. The charge is 0.20 INR for 1 day.

```
#include <stdio.h>

int main()
{
float b;
const float a = 0.2;
printf("Enter number of days of late return book \n");
scanf("%f",&b);
b=b*a;
printf("The total fine charged is : %0.2f INR",b);
return(0);
}
```

Output

```
Enter number of days of late return book
20
The total fine charged is : 4.00 INR
```

Q8.You had bought a nice shirt which cost Rs.29.90 exclusive of 15% discount. Count the discounted price for the shirt.

```
#include <stdio.h>

int main()
{
float cost = 29.90;
float discount = 0.15;
float discounted_cost, ldc;
ldc=cost*discount;
discounted_cost=cost - ldc;
printf("The discounted cost price for the shirt is : %0.2f INR",discounted_cost);
return(0);
}
```

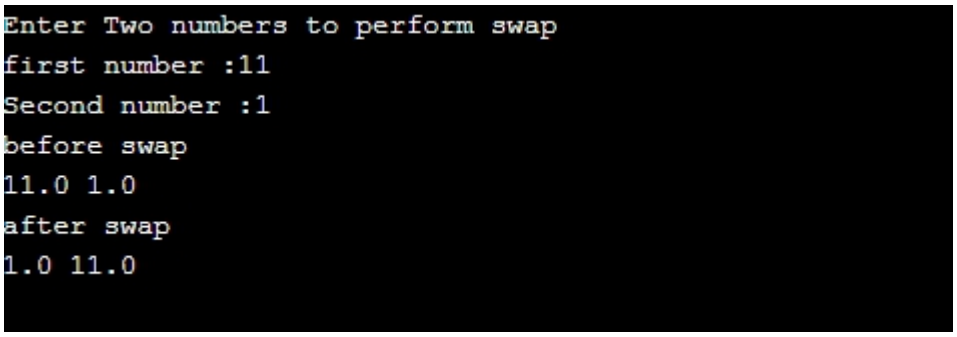
Output

```
The discounted cost price for the shirt is : 25.41 INR
```

Q9. swap two numbers with third variable

```
#include <stdio.h>

int main()
{
float a,b,c;
printf("Enter Two numbers to perform swap \n");
printf("first number :");
scanf("%f",&a);
printf("Second number :");
scanf("%f",&b);

printf("before swap \n");
printf("%0.1f %0.1f ",a,b);

c=a;
a=b;
b=c;

printf("\n after swap \n");
printf("%0.1f %0.1f ",a,b);
return(0);
}
```

Output



Q10. swap two numbers without third variable(By + and–(or)By * and /).

```
#include <stdio.h>

int main()
{
float a,b;

printf("Enter Two numbers to perform swap \n");
printf("first number :");
scanf("%f",&a);
printf("Second number :");
scanf("%f",&b);


printf("before swap \n");
printf("%0.1f %0.1f ",a,b);

a=b-a;
b=b-a;
a=a+b;
printf("\n after swap \n");
printf("%0.1f %0.1f ",a,b);
return(0);
}
```

Output