Experiment no - 08(a)

Aim: Write a program to display the values using different data types and its address using pointer.

Algorithm:

```
i.
       Start
  ii.
        Declare v1,v2,v3
 iii.
       Declare *p1,*p2,*p3
 iv.
       Insert values
  ٧.
       Print result
 vi.
       Stop
Code:
#include <stdio.h>
int main()
{ printf("01-AlstonAlvares\n");
int v1;
float v2;
char v3;
int *p1;
float *p2;
char *p3;
v1=11;
v2=3.14;
v3='Y';
p1 = &v1;
p2 = &v2;
p3 = &v3;
printf("Address of v1 = %u\n", &v1); printf("Value is = %d\n", *p1);
printf("Address of v2 = %u\n", &v2);
printf("Value is = \%f\n", *p2);
printf("Address of v3 = %u\n", &v3);
```

 $printf("Value is = %c\n", *p3);$

```
return 0;
}
```

Output:

```
Output:

01-AlstonAlvares

Address of v1 = 3606883000

Value is = 11

Address of v2 = 3606883004

Value is = 3.140000

Address of v3 = 3606882999

Value is = Y
```

Experiment no - 08(b)

Aim: Write a program to perform addition and subtraction using pointer.

Algorithm:

- i. Start
- ii. Enter numbers
- iii. Addition or Subtraction is performed
- iv. Display results
- v. Stop

Code:

```
//Add//
#include<stdio.h>
int main()
{ printf("01-AlstonAlvares\n");
  int num1 ,num2, *p,*q,sum;
  printf("Enter any two integers:\n");
  scanf("%d%d", &num1,&num2);
```

```
p = &num1;
  q = &num2;
  sum = *p+*q;
  printf("Sum= %d\n",sum);
  return 0;
}
//Sub//
#include<stdio.h>
int main()
{ printf("01-AlstonAlvares\n");
  int num1 ,num2, *p,*q,sub;
  printf("Enter any two integers:\n");
  scanf("%d%d", &num1,&num2);
  p = &num1;
  q = &num2;
  sub = *p-*q;
  printf("Sub= %d\n",sub);
  return 0;
}
```

```
Output:
```

Add

```
O1-AlstonAlvares
Enter any two integers:
1 1
Sum= 2
...Program finished with exit code 0
Press ENTER to exit console.
```

Sub

```
O1-AlstonAlvares
Enter any two integers:
27 11
Sub= 16
...Program finished with exit code 0
Press ENTER to exit console.
```