LAB 5
Based on Switch Control Statements

1) WAP to calculate all arithmetic operations using switch control statements.

```c
#include <stdio.h>
#include <stdlib.h>
int main ()
{
    int a,b,choice,sum,difference,multiplication,division;

printf("Menu\n1.Sum\n2.Difference\n3.Multiplication\n4.Division\n");
    printf("Enter a first number\n");
    scanf("%d",&a);
    printf("Enter second number\n");
    scanf("%d",&b);
    printf("Enter operation choice\n");
    scanf("%d",&choice);
    switch(choice)
    {
    case 1:
    sum=a+b;
    printf("Sum is %d\n",sum);
    break;
    case 2:
    difference=a-b;
    printf("Difference is %d\n",difference);
    break;
    case 3:
    multiplication=a*b;
    printf("Multiplication=%d\n",multiplication);
    break;
```

```
        case 4:
        division=a/b;
        printf("Division=%d\n",division);
        break;
        default:
        printf("Invalid choice\n");
        break;
        }
        return 0;
    }
```

2) WAP to calculate all arithmetic operations on the basis of operator given by user using switch control statements.

```c
#include <stdio.h>
int main ()
{
    int a,b,sum,difference,multiplication,division;
    char choice;

printf("Menu\n1.Sum\n2.Difference\n3.Multiplication\n4.Division\n");
    printf("Enter a first number\n");
    scanf("%d",&a);
    printf("Enter second number\n");
    scanf("%d",&b);
    printf("Enter operation choice\n");
    scanf(" %c",&choice);
    switch(choice)
    {
    case '+':
    sum=a+b;
    printf("Sum is %d\n",sum);
    break;
    case '-':
```

```c
    difference=a-b;
    printf("Difference is %d\n",difference);
    break;
    case '*':
    multiplication=a*b;
    printf("Multiplication=%d\n",multiplication);
    break;
    case '/':
    division=a/b;
    printf("Division=%d\n",division);
    break;
    default:
    printf("Invalid choice\n");
    break;
    }
    return 0;
}
```

3) WAP to perform following arithmetic operations using switch control statement.

```c
#include <stdio.h>
#include <stdlib.h>
int main ()
{
   int n,ch,rev=0,digit,i,sum=0;
   int choice;
   printf("Menu\n1.Sum of n natural number\n2.Conversion to
ASCII code\n3.reverse of number\n");
   printf("Enter a choice:\n");
   scanf("%d",&choice);
   switch(choice)
   {
   case 1:
   printf("Enter a number of terms that you want to get sum\n");
   scanf("%d",&n);
   for(i=1;i<=n;i++)
   {
      sum=sum+i;
   }
   printf("Sum is %d\n",sum);
   break;
   case 2:
   printf("Enter the character\n");
   scanf("%c",ch);
   printf("The corresponding ASCII code is %d",ch);
   break;
   case 3:
   printf("Enter a number\n");
   scanf("%d",&n);
   while(n!=0)
```

```c
    {
        digit=n%10;
        rev=rev*10+digit;
        n=n/10;
    }
    printf("The reverse is %d",rev);
    break;
    case 4:
    exit(0);
    break;
    default:
    printf("Invalid choice\n");
    }
    return 0;
}
```