(i) Algorithm of Calculator

Step 1 : Input numbers num1 and num2.
Step 2 : Set run = 1.
Step 3 : Repeat step2 while run = 1.
Step 4 : Set long long Power = 1.
Step 5 : Switch for the value of opt.
Step 6 : If the user entered 1, then add num1 and num2
Step 7 : If the user entered 2, then subtract num1 and num2
Step 8 : If the user entered 3, then multiply num1 and num2
Step 9 : If the user entered 4, then

```
IF num2 == 0
    PRINT cannot divide by zero.
ELSE
    Divide num1 and num2.
```

Step 10 : If the user entered 5, then

```
IF num1 > num2
    PRINT num1 is greater than num2.
ELSE
    PRINT num2 is greater than num1.
```

Step 11 : If the user entered 6, then

```
IF num1 < num2
    PRINT num1 is less than num2.
ELSE
    PRINT num2 is less than num1.
```

Step 12 : If the user entered 7, then

IF (num1 == num2)

PRINT Both numbers are equal.

ELSE

PRINT Both numbers are not equal.

Step 13 : If the user entered 8, then

IF num1 != num2

PRINT Both numbers are not equal.

ELSE

PRINT Both numbers are equal.

Step 14 : If the user entered 9, then

Print the average of num1 and num2.

Step 15 : If the user entered 10, then

num2 != 0 and Repeat this step

until while (num2 != 0). set

Power *= num1 and --num2. and

Print ~~Power of~~ num1 Power num2.

Step 16 : If the user entered 11, then

run=0 and exit from the Program

step 17 : If the user entered any number

more than 11 then Print inPut

Correct option and exit from the

Program.