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Sap ID: 49710

BSCS-5th Semester

OS Lab Tasks

LAB # 6

Submitted to:

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Task 1: Write a C program that print your name and sap id and Show the output.

```
student@student-virtual-machine:~$ pico name_SAP.C
student@student-virtual-machine:~$ cat name_sap.c
#include <stdio.h>
int main()
{
printf("Name:  Deher \n");
printf("sAP  id: 49710 ");
return 0;
}
student@student-virtual-machine:~$ gcc name_sap.c -o name_sap
student@student-virtual-machine:~$ ./name_sap
Name:  Deher
sAP  id: 49710 student@student-virtual-machine:~$ █
```

Task 2: Write a C program that asks the user to enter a number and determine whether the number entered is even or odd. Show the output.

```
sAP id: 49710 student@student-virtual-machine:~$ pico even_odd.c
student@student-virtual-machine:~$ cat even_odd.c
#include<stdio.h>
int main()
{
int num;
printf("enter a number:");
scanf("%d" , &num);
if (num % 2 == 0)
printf("%d  is even.\n" , num);
else
printf("%d is odd.\n" , num);
return 0;
}
student@student-virtual-machine:~$ gcc even_odd.c -o even_odd
student@student-virtual-machine:~$ ./even_odd.c
bash: ./even_odd.c: Permission denied
student@student-virtual-machine:~$ ./even_odd\
> ^C
student@student-virtual-machine:~$ ./even_odd
enter a number:2
2  is even.
student@student-virtual-machine:~$ gcc even_odd.c -o even_odd
student@student-virtual-machine:~$ ./even_odd
enter a number:9
9 is odd.
```

Task 3: Write a C program to calculate the factorial of a number using a while loop take a number from user.

```
student@student-virtual-machine:~$ pico factorial.c
student@student-virtual-machine:~$ cat factorial.c
#include<stdio.h>
int main()
{
int num, factorial= 1,i;
printf("enter a number:");
scanf("%d" , &num);
i= num;
while(i>0){
factorial *= i;
i--;
}
printf("factorial of %d is %d\n", num,factorial);
return 0;
}
student@student-virtual-machine:~$ gcc factorial.c -o factorial
student@student-virtual-machine:~$ ./factorial
enter a number:7
factorial of 7 is 5040
student@student-virtual-machine:~$
```

Task 4: Write a C program that uses an infinite for loop to print a name continuously.

```
student@student-virtual-machine:~$ pico infinite_loop.c
student@student-virtual-machine:~$ cat infinite_loop.c
#include<stdio.h>
int main()
{
for(;;)
{
printf("Deher/n");
}
return 0;
}
student@student-virtual-machine:~$ gcc infinite_loop.c -o infinite_loop
student@student-virtual-machine:~$ ./infinite_loop
```

Task 5: Write a program to print average of three numbers in c program.

```
student@student-virtual-machine:~$ cd
student@student-virtual-machine:~$ pico file1.c
student@student-virtual-machine:~$ cat file1.c
#include<stdio.h>
int main()
{
float num1, num2, num3, average;
printf("Enter the First Number: ");
scanf("%f", &num1);

printf("Enter the Second Number: ");
scanf("%f", &num2);

printf("Enter the Third Number: ");
scanf("%f", &num3);

average = (num1 + num2 + num3) / 3;
printf("The AVERAGE of %.2f, %.2f, and %.2f is %.2f\n",num1, num2, num3, average);
return 0;
}
student@student-virtual-machine:~$ gcc file1.c -o fileeeeeee
student@student-virtual-machine:~$ ./fileeeeeee
```