#using function

a=int(input("enter a value"))

b=int(input("enter b value"))

def add():

c=a+b

return c

print(("addition of a+b"),add())

def sub():

return a-b

print(("subtraction of a-b"),sub())

def multiplication():

return a\*b

print(("multiplication of a\*b"),multiplication())

def divide():

return a/b

print(("division of a/b"),divide())

***OUTPUT***

enter a value100

enter b value200

addition of a+b 300

subtraction of a-b -100

multiplication of a\*b 20000

division of a/b 0.5

**Program-11**

#using function

a=int(input("enter a value"))

b=int(input("enter b value"))

def add():

c=a+b

return c

print(("addition of a+b"),add())

def sub():

return a-b

print(("subtraction of a-b"),sub())

def multiplication():

return a\*b

print(("multiplication of a\*b"),multiplication())

def divide():

return a/b

print(("division of a/b"),divide())

***OUTPUT***

enter value of i: 100

enter value of j: 80

what do you want to do? +,-,\*,/:+

addition= 180

enter value of i: 200

enter value of j: 120

what do you want to do? +,-,\*,/:-

subtraction= 80

enter value of i: 20

enter value of j: 30

what do you want to do? +,-,\*,/:\*

multiplication= 600

enter value of i: 100

enter value of j: 10

what do you want to do? +,-,\*,/:/

division= 10.0

**Program-12**

#snake and ladder import random

count=0

def myroll():

return random.randint(1,6)

while(count<=100):

n=input("press r to roll the dice")

if(n=='r'):

r=myroll()

count=count+r

print("you got",r)

print("new position is",count)

if(count==8):

count=37

print("yay you got the ladder")

elif(count==11):

count=2

print("sorry,snake bit you")

elif(count==13):

count=34

print("yay you got the ladder")

elif(count==25):

count=4

print("sorry,snake bit you")

elif(count==38):

count=9

print("sorry,snake bit you")

elif(count==40):

count=68

print("yay you got the ladder")

elif(count==52):

count=81

print("yay you got the ladder")

elif(count==65):

count=46

print("sorry,snake bit you")

elif(count==76):

count=97

print("yay you got the ladder")

elif(count==89):

count=70

print("sorry,snake bit you")

elif(count==93):

count=64

print("sorry,snake bit you")

elif(count>100):

print("count is beyond 100")

count=count-r

elif(count==100):

print("YOU WON THE GAME")

break

**OUTPUT**

python3 dicefun.py

press r to roll the dicer

you got 2

new position is 2

press r to roll the dicer

you got 4

new position is 6

press r to roll the dicer

you got 1

new position is 7

press r to roll the dicer

you got 5

new position is 12

press r to roll the dicer

you got 6

new position is 18

press r to roll the dicerrrr

press r to roll the dicer

you got 3

new position is 21

press r to roll the dicer

you got 3

new position is 24

press r to roll the dicer

you got 2

new position is 26

press r to roll the dicer

you got 4

new position is 30

press r to roll the dicer

you got 4

new position is 34

press r to roll the dicer

you got 3

new position is 37

press r to roll the dicer

you got 3

new position is 40

yay you got the ladder

press r to roll the dicer

you got 1

new position is 69

press r to roll the dicer

you got 1

new position is 70

press r to roll the dicer

you got 1

new position is 71

press r to roll the dicer

you got 2

new position is 73

press r to roll the dicer

you got 5

new position is 78

press r to roll the dicer

you got 3

new position is 81

press r to roll the dicer

you got 6

new position is 87

press r to roll the dicer

you got 3

new position is 90

press r to roll the dicer

you got 2

new position is 92

press r to roll the dicer

you got 3

new position is 95

press r to roll the dicer

you got 6

new position is 101

count is beyond 100

press r to roll the dicer

you got 1

new position is 96

press r to roll the dicer

you got 1

new position is 97

press r to roll the dicer

you got 5

new position is 102

count is beyond 100

press r to roll the dicer

you got 1

new position is 98

press r to roll the dicer

you got 2

new position is 100

YOU WON THE GAME

INPUT:

import random

p={1:'r',2:'p',3:'s'}

while True:

yc=input("your choice: r/p/s:")

cc=p[random.randint(1,3)]

print("computer gave:",cc)

OUTPUT:

your choice: r/p/s:r

computer gave: s

your choice: r/p/s:p

computer gave: r

your choice: r/p/s:s

computer gave: s

**Program-13**

#rock paper scissors

import random

p={1:'r',2:'p',3:'s'}

while True:

yc=input("your choice: r/p/s:")

cc=p[random.randint(1,3)]

print("computer gave:",cc)

if(yc==cc):

print("its a tie")

elif(cc=='r' and yc=='s' or cc=='p' and yc=='r' or cc=='s' and yc=='p'):

print("computer won")

else:

print("you won")

**OUTPUT:**

your choice: r/p/s:r

computer gave: s

you won

your choice: r/p/s:p

computer gave: s

computer won

your choice: r/p/s:s

computer gave: s

its a tie