Dice GAME SOURCECODE

```
#This programm for the playing dice game
#import random module
#import numpy module
import random
import numpy as np
#Constants for the minimum and maximum random numbers
MAX = 6
MIN = 2
k = 1
again_dice = 0 #creat a variable to control the loop
#create def function
def main():
  dice_welcome()
  dice_rules()
  #calculate play again and Exit
  play_dice = True
  while play_dice:
     get_score ()
     again_dice: str = input('Do you want to play again? (y/n):')
     #if the user wants to do another one
     if again_dice == 'n':
       print('good bye')
       play_dice= False
#create dice dice processing function
def get_score():
  players = int(input('how many players are there(1..4):'))
```

```
array = np.arange(players) #create numpy array type
  for r in range(5): #create for loop each player playing five rounds
     print(round', str(k + r))
     # creat while loop genarate players
     i = 1
     while i <= players:
       dice val = 0 #intitialize variable
       # print(input('Enter player '))
       dice_val = random.randint(MIN, MAX) #genarate random values assigned to
'dice_val' variable
       array[i - 1] = array[i - 1] + dice_val #'dice_val' variable values add array elements
       print('Rolling dice for player', i, ':', (dice_val))#print player roll dice values
       i = i + 1
  #find winner
  winner = 0 # intitialize variable
  for x in array:
     if x > winner:
       winner = x
  print(array) #Each player got score
  print(winner)
  result = np.where(array == winner) #
  a = result[0].astype(int) #
  print(a + 1)
  print("The winner is player", a + 1)
#print dice game login
def dice_welcome():
  print('############WELCOME########### \n\t'
           NASTY DICE GAME!
                                          ')
#print dice game ruls
```

```
def dice_rules():
  print('* Each player rolls five dice ')
  print('* Each player get sum ')
  print(' highs score win')
  print('* player wants to play again or ')
  print(' Exist game put it (y/n)')
main()
Dice Game Output
= RESTART: C:\Users\USER\Desktop\New folder\K.D Isuru Sankhajith-Student ID-
AA107211CC,ID-980912434V.py
NASTY DICE GAME!
* Each player rolls five dice
* Each player get sum
 highs score win
* player wants to play again or
 Exist game put it (y/n)
how many players are there(1..4) :4
round 1
Rolling dice for player 1:4
Rolling dice for player 2:2
Rolling dice for player 3:3
Rolling dice for player 4:3
round 2
Rolling dice for player 1:6
Rolling dice for player 2:2
Rolling dice for player 3:4
Rolling dice for player 4:4
round 3
```

Rolling dice for player 1:6

```
Rolling dice for player 2:3
```

Rolling dice for player 3:6

Rolling dice for player 4:2

round 4

Rolling dice for player 1:2

Rolling dice for player 2:6

Rolling dice for player 3:2

Rolling dice for player 4:4

round 5

Rolling dice for player 1:6

Rolling dice for player 2:4

Rolling dice for player 3:4

Rolling dice for player 4:5

[24 18 21 21]

24

[1]

The winner is player [1]

Do you want to play again? (y/n):n

good bye

>>>

Dice Game Psudocode

Import random module

Import numpy module

Create 'max' variable is 6

Create 'min' variable is 2

Create 'k' variable is 1

Create 'again' variable control to the loop

Create define 'main' function:

Display 'dice_welcome'

Display 'dice_rule'

```
Play_ dice is true
       Create while loop play_dice:
       Display get_score
       Input str "Do you want to play again" assing again_dice variable
       If again sice equal to 'n'
               Print 'good bye'
               Play dice eqval to 'False'
Create define get_score function:
       Players input 'How many players are there(1...4)
       Create array np.arrange assing players variables value
       for loop range (5):
               print 'round' conver str k +r
               I variable assing to one
               While less than equall to player
               Genater random numbers min between max assing dice val
               Arraty [I -1 eqval array[I - 1] plus dice val
               Print ('Rolling dice for player , i,':',(dice_val))
               I equal I plus one
Intitialize wiiner variable assing = 0
For x in array:
If condition x in array:
       If x greterthan eqval winner:
               Winner assing x
Print (array)
Prin (winner)
Result = np. Where (array eqval to winner)
```